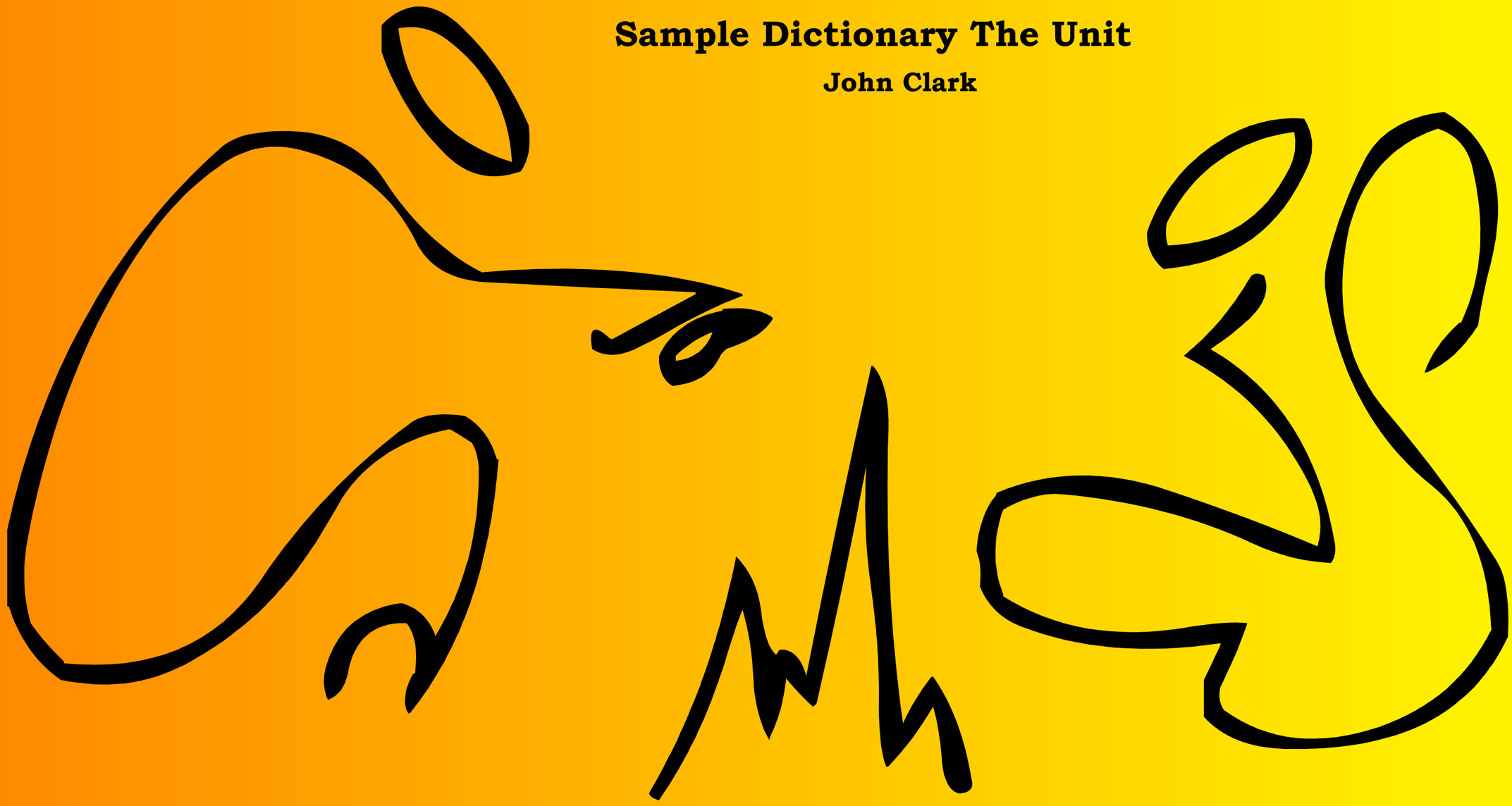
Basic Analog Grammar

Sample Dictionary The Unit

John Clark



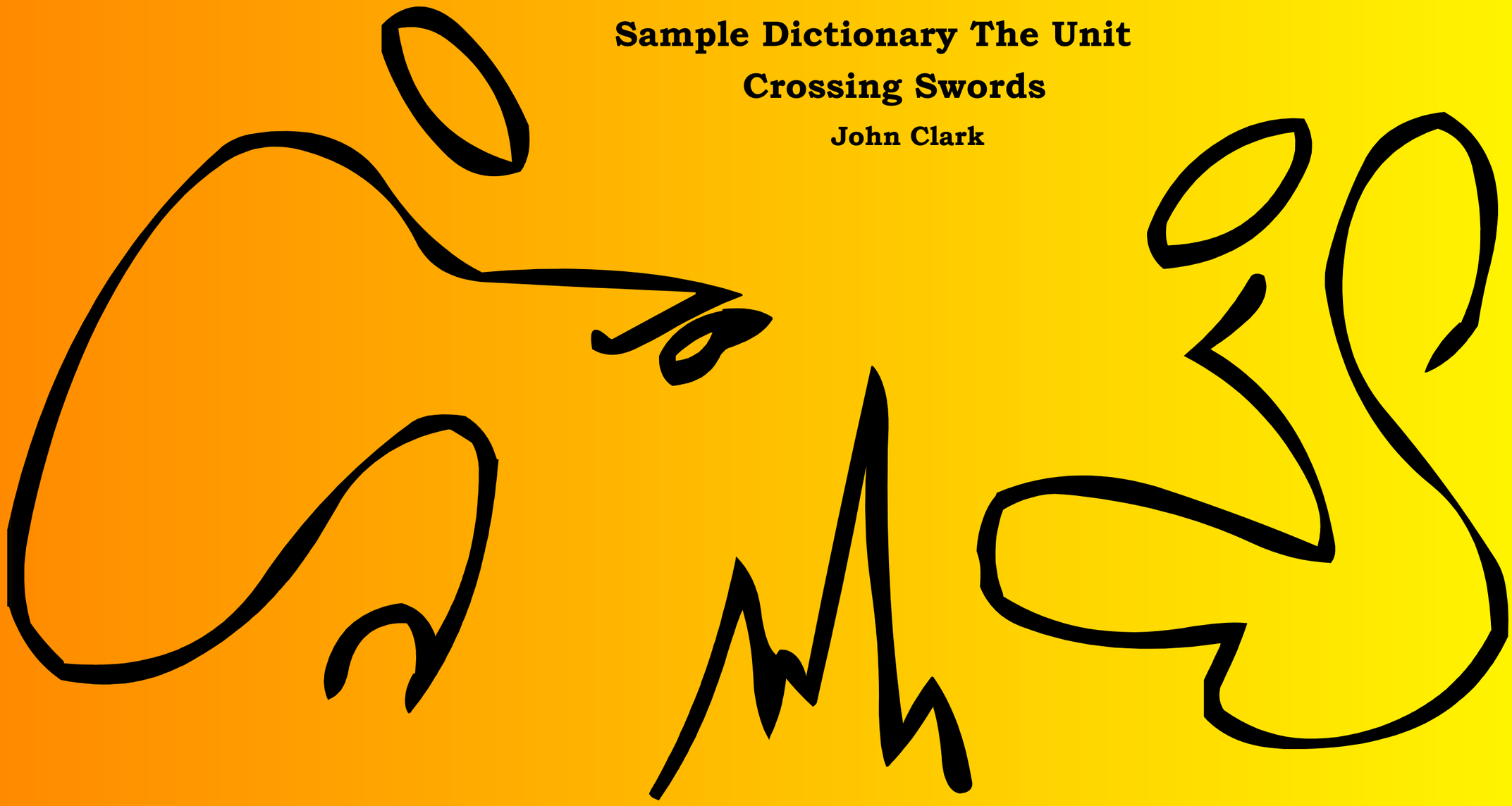
John 312

Basic Analog Grammar

Sample Dictionary The Unit

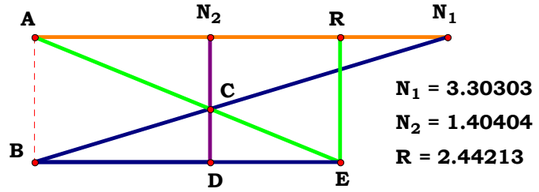
Crossing Swords

John Clark



John 312

1CST1R0A



Unit. $AB := 1$ **Given.** $N_1 := 3.30303$ $N_2 := 1.40404$

Descriptions.

If we establish a simple convention of names, leaving out the fact that this convention imples a arbitrary method of division, we get a simple arithmetic result.

$$CD := \frac{AB \cdot N_2}{N_1} \qquad DE := \frac{N_2 \cdot CD}{AB - CD}$$

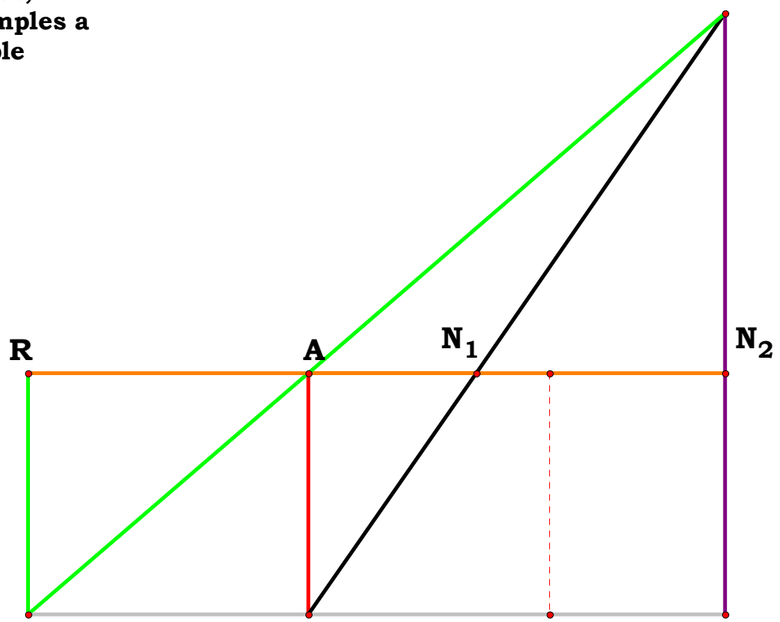
$$BE := N_2 + DE \qquad R := BE$$

$R = 2.442133$

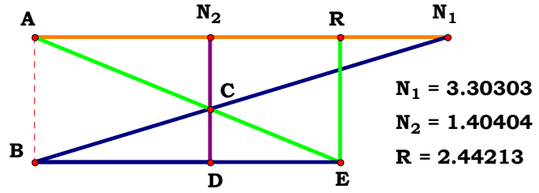
Definitions.

And this result will reduce to this definition.

$$R - \frac{N_1 \cdot N_2}{N_1 - N_2} = 0$$



1CST1R0B



Unit. $AB := 1$ $N_u := 3$ **Given.** $N_1 := 3.30303$ $N_2 := 1.40404$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

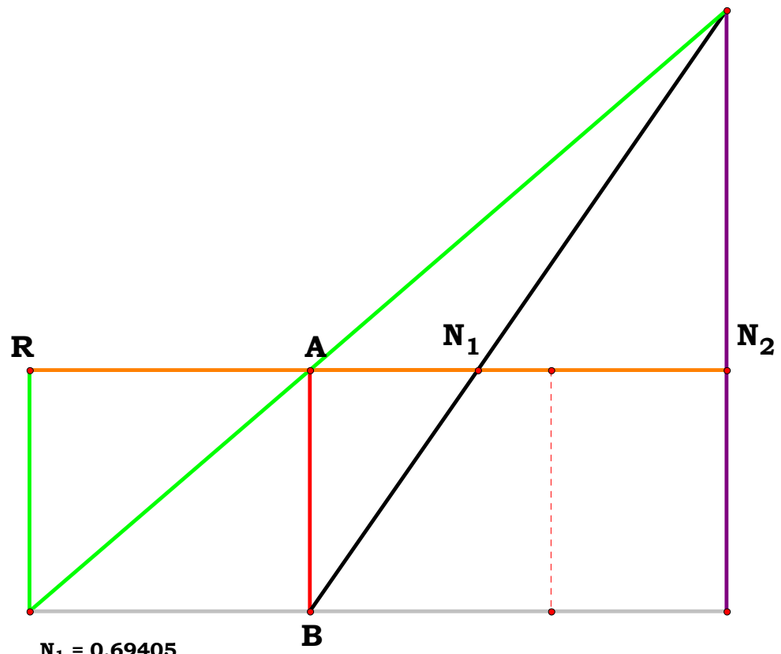
If, however, our starting names are a part of something else, well we can first do the process as plate A and then convert the results.

Descriptions.

$CD := \frac{AB \cdot N_2}{N_1}$ $DE := \frac{N_2 \cdot CD}{AB - CD}$

$BE := N_2 + DE$ $R := BE$

$R = 2.442133$



Definitions.

We start with our original arithmetic result,

$$R - \frac{N_1 \cdot N_2}{N_1 - N_2} = 0$$

Transform the rest of our givens like such

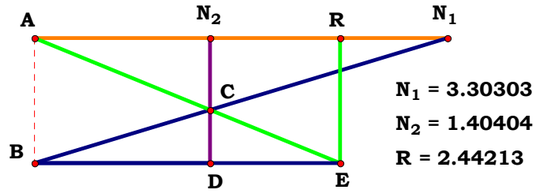
$$N_1 - \frac{N_u}{A} = 0$$

$$N_2 - \frac{N_u}{B} = 0$$

Making our substitutions we get a completely different equation where any value whatsoever can be plugged into N_u and the arithmetic result will not change, ever. So, in our first plate, we got a particular result, where here, we get a result that is apparently universal for any base system used in math.

$$R - \frac{N_u}{B - A} = 0$$

1CST1R0C



Unit. $AB := 1$ **Given.** $N_1 := 3.30303$ $N_2 := 1.40404$

$W := 20$

$X := 15$ $Y := \frac{W}{N_1}$ $Z := \frac{X}{N_2}$

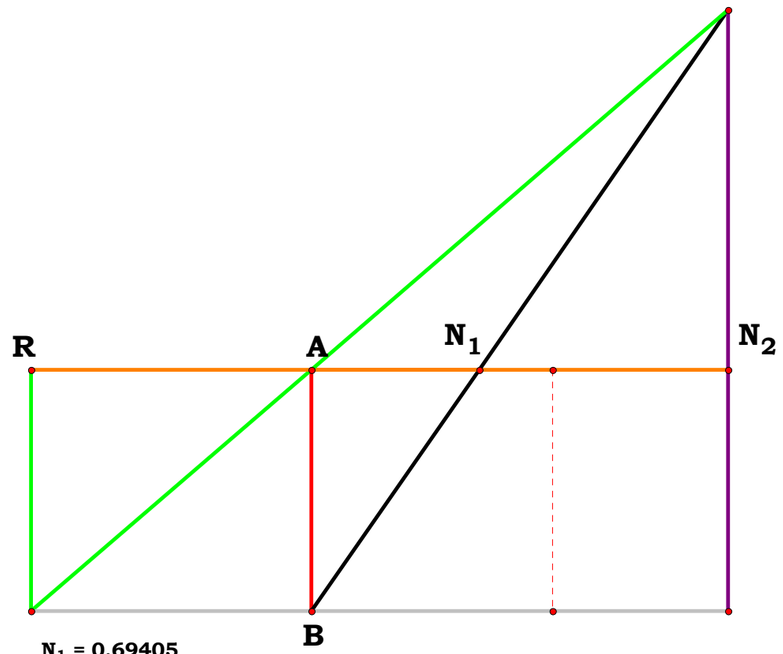
Descriptions.

Let us suppose that we treat each unit as a ratio to something peculiar to it. We start with the simple arithmetic naming convention, if we like. We have already done that work, why waste it?

$CD := \frac{AB \cdot N_2}{N_1}$ $DE := \frac{N_2 \cdot CD}{AB - CD}$

$BE := N_2 + DE$ $R := BE$

$R = 2.442133$



Definitions.

So again, we take our original result.

$$R - \frac{N_1 \cdot N_2}{N_1 - N_2} = 0$$

Prepare our substitutions

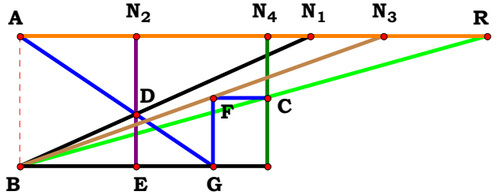
$$N_1 - \frac{W}{Y} = 0$$

$$N_2 - \frac{X}{Z} = 0$$

And often our result will look very similar to our simple equation, only this time, we have a ratio between four terms. And, as every grammar is binary, our arithmetic result will always remain the same, exeept here, we can make W and X any value we wish, or take it from the things we are writing up, and the arithmetric results, once again, will not change. However, now we have an eqation which can work with any two things no matter if the material difference is not the same.

$$R - \frac{W \cdot X}{W \cdot Z - X \cdot Y} = 0$$

1CST1R1



$N_1 = 2.22514$
$N_2 = 0.88850$
$N_3 = 2.79164$
$N_4 = 1.89818$
$R = 3.58260$

Unit. $AB := 1$ Given. $N_1 := 2.22514$ $N_2 := .88850$ $N_3 := 2.79164$ $N_4 := 1.89818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BE := N_2$

$BG := \frac{N_1 \cdot N_2}{N_1 - N_2}$ $FG := \frac{AB \cdot BG}{N_3}$

$R := \frac{N_4}{FG}$

$R = 3.582585$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

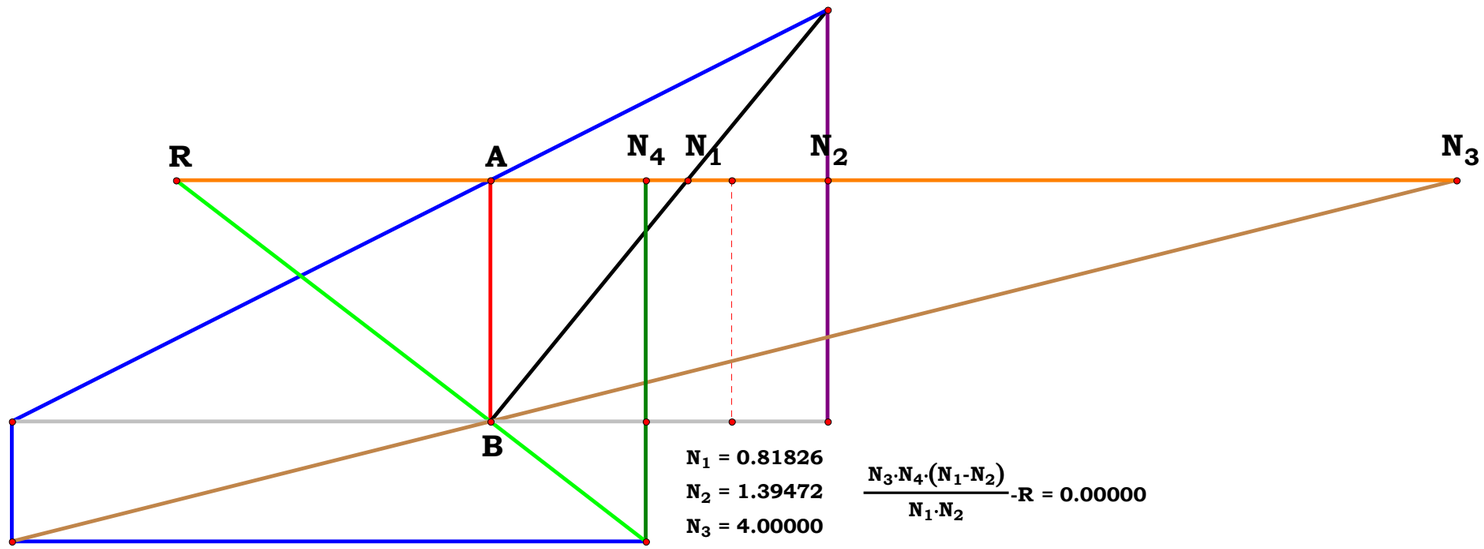
$N_3 - \frac{N_u}{C}$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (B - A)}{C \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

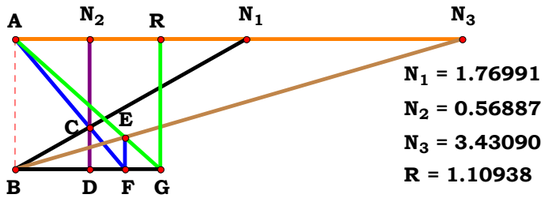
$R - \frac{[Y \cdot Z \cdot (W \cdot n - X \cdot m)]}{W \cdot X \cdot o \cdot p} = 0$



$N_1 = 0.81826$
$N_2 = 1.39472$
$N_3 = 4.00000$
$N_4 = 0.64431$
$R = -1.30179$

$\frac{N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_2} - R = 0.00000$

1CST1R3



Unit. $AB := 1$ **Given.** $N_1 := 1.76991$ $N_2 := .56887$ $N_3 := 3.43090$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AB := 1$ $BF := \frac{N_1 \cdot N_2}{N_1 - N_2}$

$EF := \frac{BF}{N_3}$ $BG := \frac{BF \cdot AB}{AB - EF}$

$R := BG$ $R = 1.109383$

Definitions.

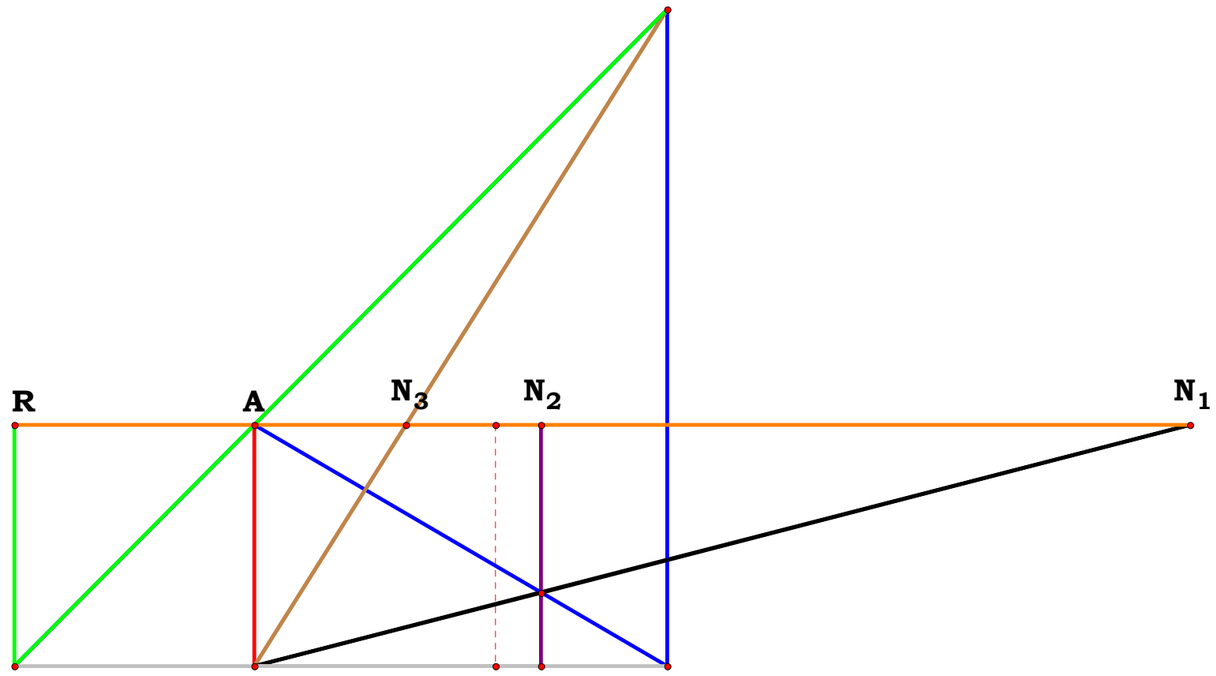
$$R - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_3 - N_1 \cdot N_2 - N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

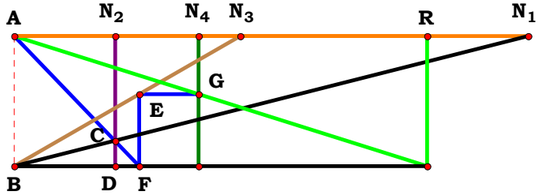
$$R - \frac{N_u}{B - A - C} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Y \cdot Z}{X \cdot Z \cdot p - X \cdot Y \cdot q - Y \cdot Z \cdot o} = 0$$



1CST1R4



$N_1 = 3.93952$
$N_2 = 0.77227$
$N_3 = 1.73589$
$N_4 = 1.41390$
$R = 3.16562$

Unit. $AB := 1$ **Given.** $N_1 := 3.93952$ $N_2 := .77227$ $N_3 := 1.73589$ $N_4 := 1.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$CD := \frac{N_2}{N_1}$ $BF := \frac{N_2}{AB - CD}$

$EF := \frac{BF}{N_3}$ $GN_4 := AB - EF$

$R := \frac{N_4}{GN_4}$ $R = 3.165638$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_2 - N_1)}{N_1 \cdot N_2 - N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

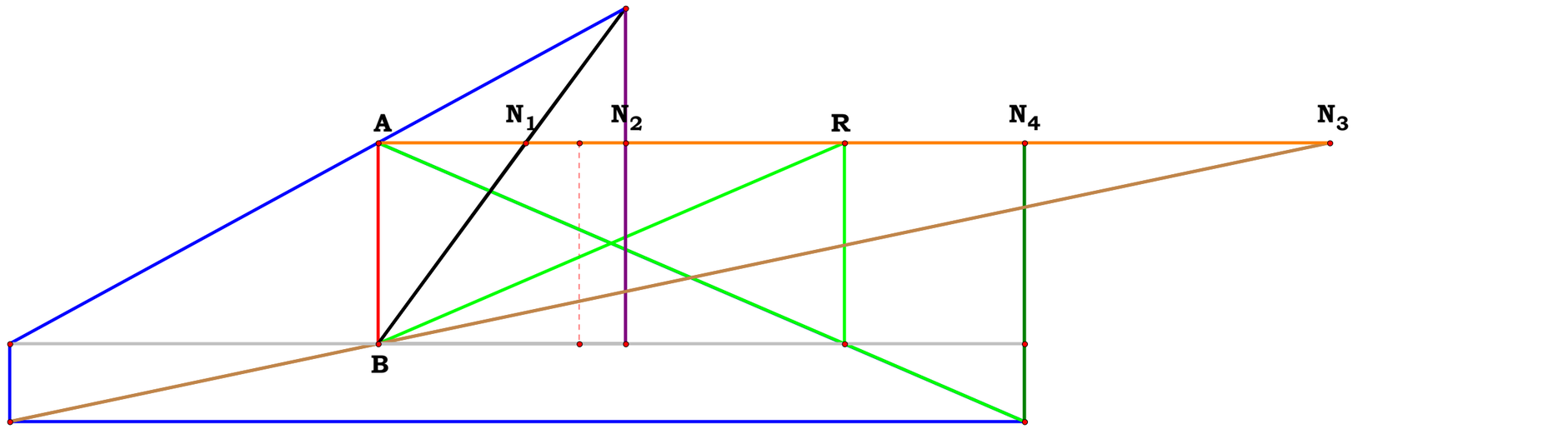
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (A - B)}{D \cdot (A - B + C)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

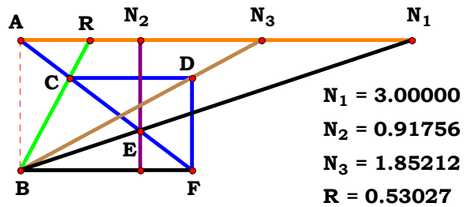
$$R - \frac{Y \cdot Z \cdot (W \cdot n - X \cdot m)}{p \cdot (W \cdot Y \cdot n - W \cdot X \cdot o - X \cdot Y \cdot m)} = 0$$



$N_1 = 0.73460$
$N_2 = 1.22740$
$N_3 = 4.72682$
$N_4 = 3.21171$
$R = 2.31545$

$\frac{N_3 \cdot N_4 \cdot (N_2 - N_1)}{(N_1 \cdot N_2 - N_1 \cdot N_3) + N_2 \cdot N_3} - R = 0.00000$

1CST1R5



$N_1 = 3.00000$
$N_2 = 0.91756$
$N_3 = 1.85212$
$R = 0.53027$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .91756$ $N_3 := 1.85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$EN_2 := AB - \frac{N_2}{N_1}$ $BF := \frac{N_2}{EN_2}$

$DF := \frac{BF}{N_3}$ $CD := BF \cdot DF$

$R := \frac{BF - CD}{DF}$ $R = 0.530267$

Definitions.

$$R - \frac{N_1 \cdot N_2 - N_1 \cdot N_3 + N_2 \cdot N_3}{N_2 - N_1} = 0$$

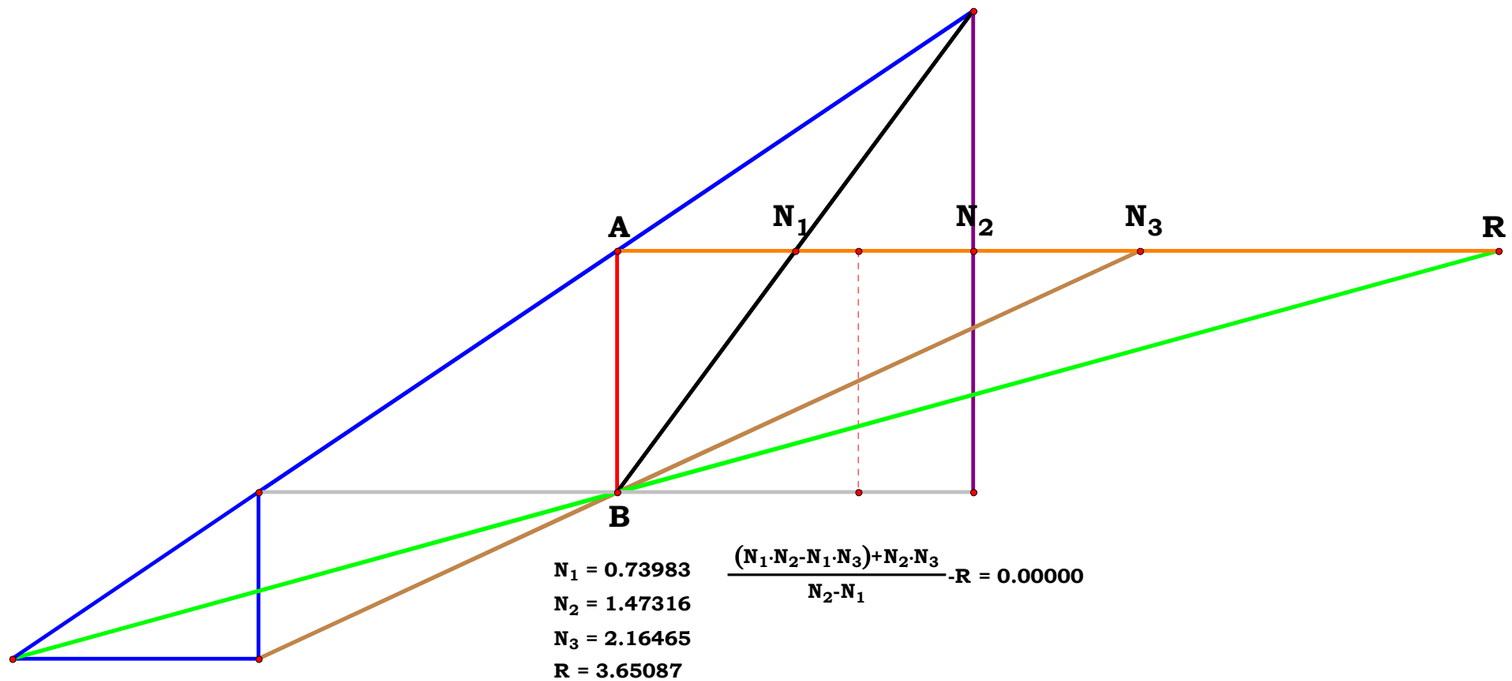
N_u

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A - B + C)}{A \cdot C - B \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

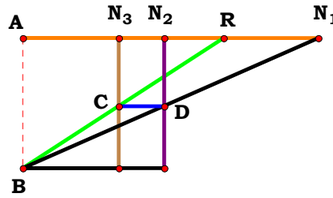
$$R - \frac{X \cdot Z \cdot p - X \cdot Y \cdot q - Y \cdot Z \cdot o}{q \cdot (X \cdot p - Y \cdot o)} = 0$$



$N_1 = 0.73983$
$N_2 = 1.47316$
$N_3 = 2.16465$
$R = 3.65087$

$\frac{(N_1 \cdot N_2 - N_1 \cdot N_3) + N_2 \cdot N_3}{N_2 - N_1} - R = 0.00000$

1CST1R7



$N_1 = 2.26388$
$N_2 = 1.08221$
$N_3 = 0.73826$
$R = 1.54435$

Unit. $AB := 1$ Given. $N_1 := 2.26388$ $N_2 := 1.08221$ $N_3 := .73826$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CN_3 := AB - \frac{N_2}{N_1}$ $R := \frac{N_3}{AB - CN_3}$

$R = 1.544369$

Definitions.

$R - \frac{N_1 \cdot N_3}{N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

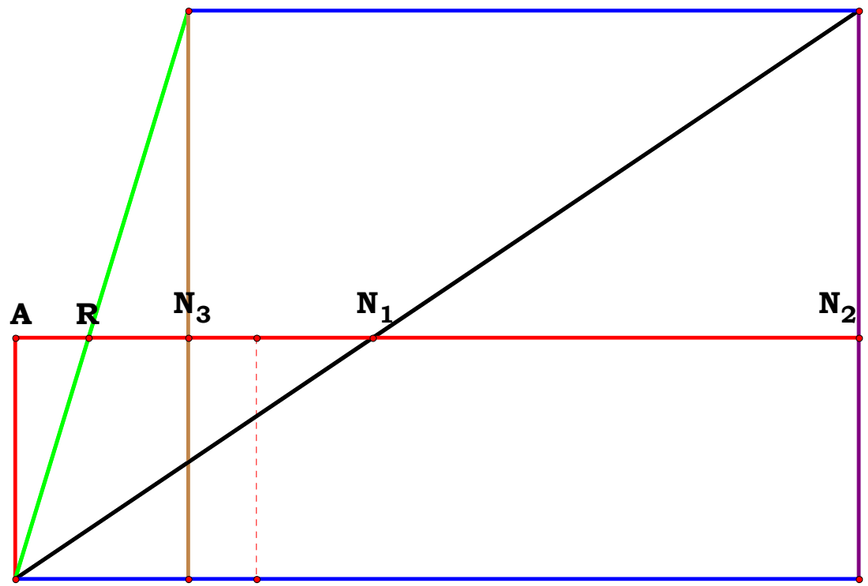
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{B \cdot N_u}{A \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

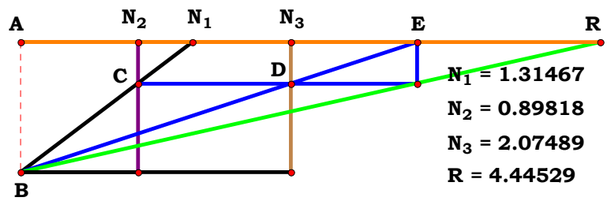
$R - \frac{X \cdot Z \cdot p}{Y \cdot o \cdot q} = 0$



$N_1 = 1.48234$
$N_2 = 3.49152$
$N_3 = 0.71624$
$R = 0.30408$

$\frac{N_1 \cdot N_3}{N_2} - R = 0.00000$

1CST1R8



Unit. $AB := 1$ **Given.** $N_1 := 1.31467$ $N_2 := .89818$ $N_3 := 2.07489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CN_2 := AB - \frac{N_2}{N_1}$ $AE := \frac{N_3}{AB - CN_2}$

$R := \frac{AE}{AB - CN_2}$ $R = 4.445308$

Definitions.

$R - \frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

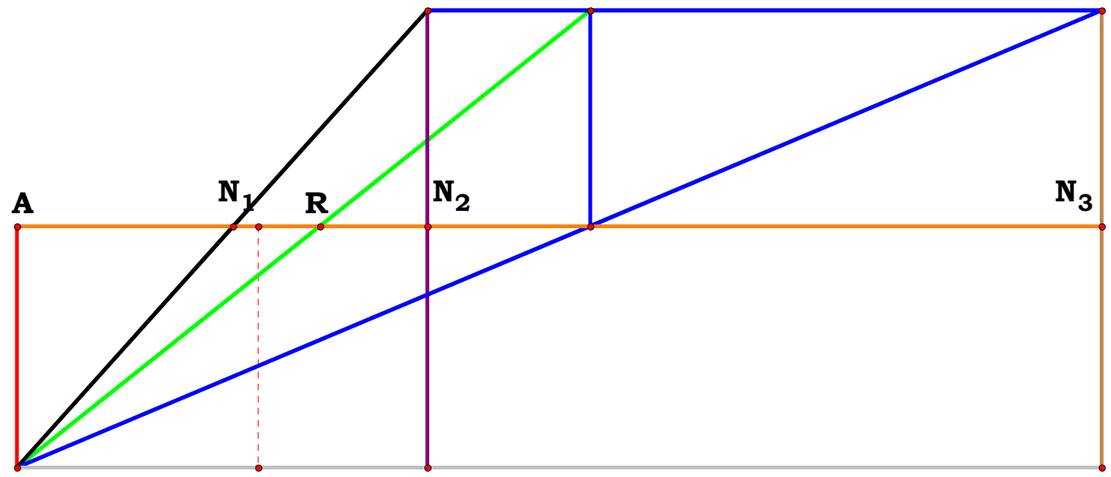
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{B^2 \cdot N_u}{A^2 \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

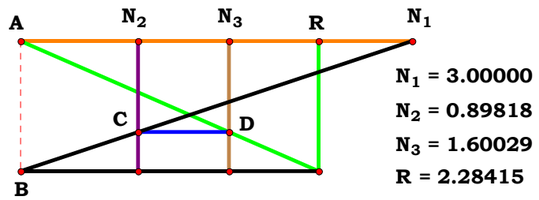
$R - \frac{X^2 \cdot Z \cdot p^2}{Y^2 \cdot o^2 \cdot q} = 0$



$N_1 = 0.89670$
$N_2 = 1.69800$
$N_3 = 4.49152$
$R = 1.25260$

$\frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}} - R = 0.00000$

1CST1R9



$N_1 = 3.00000$
$N_2 = 0.89818$
$N_3 = 1.60029$
$R = 2.28415$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .89818$ $N_3 := 1.60029$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CN_2 := AB - \frac{N_2}{N_1}$ $R := \frac{N_3}{CN_2}$

$R = 2.284149$

Definitions.

$$R - \frac{N_1 \cdot N_3}{N_1 - N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

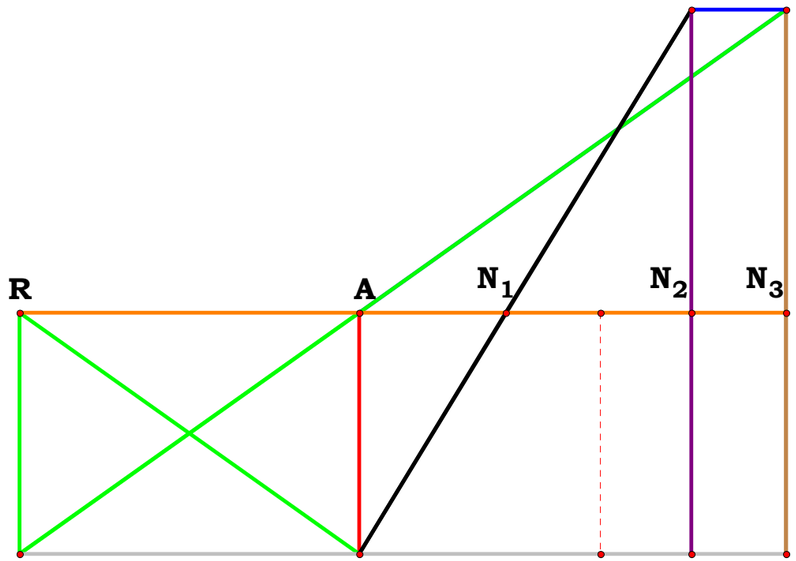
$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{B \cdot N_u}{C \cdot (B - A)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0$$

$$N_3 - \frac{Z}{q} = 0$$

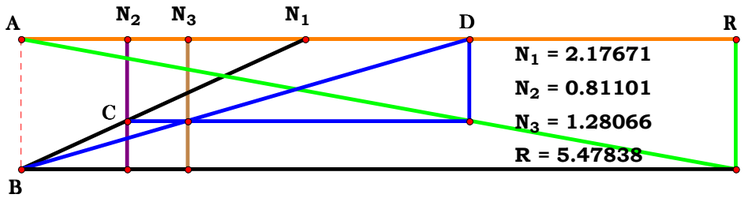
$$R - \frac{X \cdot Z \cdot p}{X \cdot p \cdot q - Y \cdot o \cdot q} = 0$$



$N_1 = 0.60911$
$N_2 = 1.37381$
$N_3 = 1.76725$
$R = -1.40767$

$\frac{N_1 \cdot N_3}{N_1 - N_2} - R = 0.00000$

1CST1R10



Unit. $AB := 1$ Given. $N_1 := 2.17671$ $N_2 := .81101$ $N_3 := 1.28066$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CN_2 := AB - \frac{N_2}{N_1}$ $AD := \frac{N_3}{AB - CN_2}$

$R := \frac{AD}{CN_2}$ $R = 5.478397$

Definitions.

$R - \frac{N_1^2 \cdot N_3}{N_2 \cdot (N_1 - N_2)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

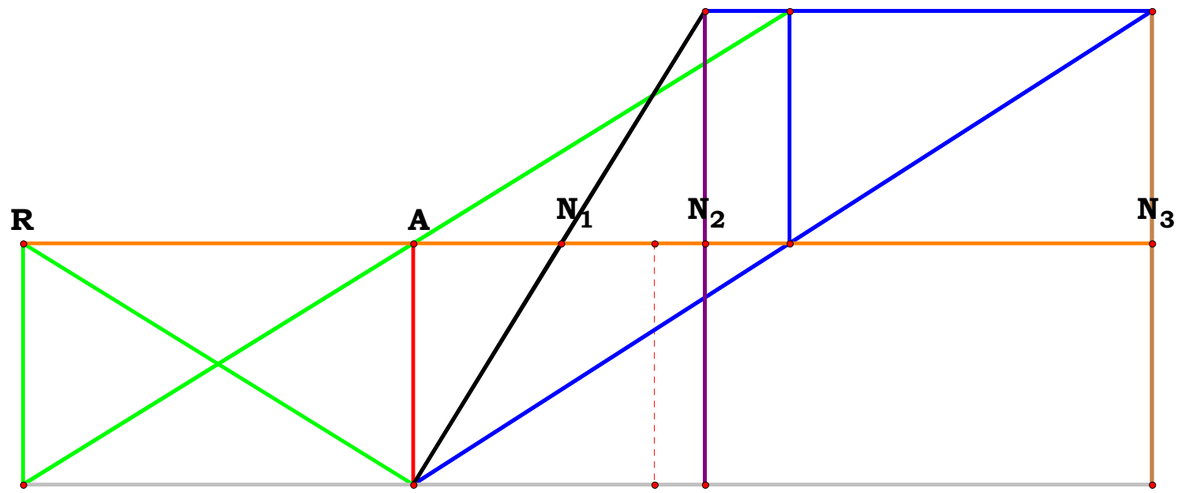
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{B^2 \cdot N_u}{C \cdot (A \cdot B - A^2)} = 0$

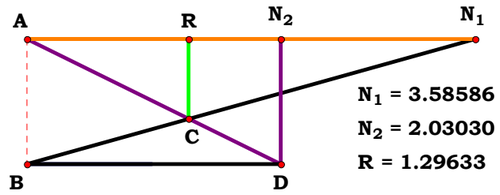
$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

$R - \frac{X^2 \cdot Z \cdot p^2}{Y \cdot o \cdot q \cdot (X \cdot p - Y \cdot o)} = 0$



1CST2R0



$N_1 = 3.58586$

$N_2 = 2.03030$

$R = 1.29633$

Unit. $AB := 1$ Given. $N_1 := 3.58586$ $N_2 := 2.03030$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BD := N_2$ $R := \frac{BD \cdot N_1}{BD + N_1}$

$R = 1.296326$

Definitions.

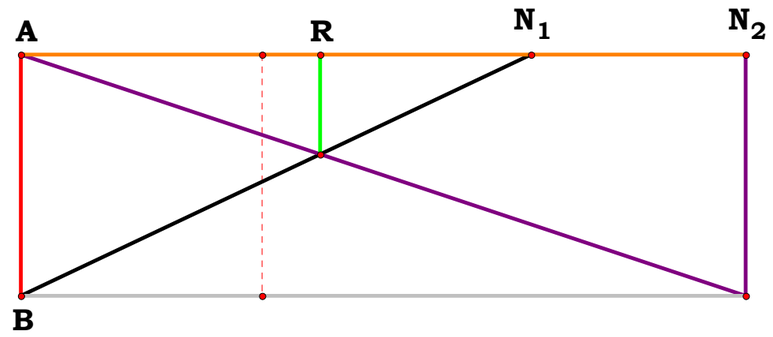
$R - \frac{N_1 \cdot N_2}{N_1 + N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u}{A + B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z}{Y \cdot q + Z \cdot p} = 0$



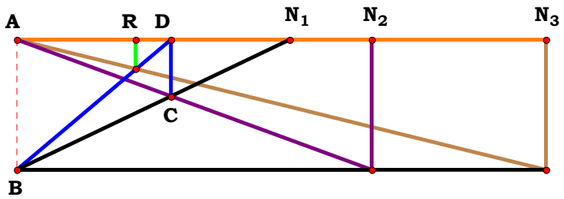
$N_1 = 2.11504$

$N_2 = 3.00000$

$R = 1.24048$

$\frac{N_1 \cdot N_2}{N_1 + N_2} - R = 0.00000$

1CST2R1



$N_1 = 2.08954$

$N_2 = 2.71911$

$N_3 = 4.06048$

$R = 0.91523$

Unit. $AB := 1$ **Given.** $N_1 := 2.08954$ $N_2 := 2.71911$ $N_3 := 4.06048$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AD := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad R := \frac{AD \cdot N_3}{AD + N_3}$$

$R = 0.915233$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 + N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u}{A + B + C} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Y \cdot Z}{X \cdot Y \cdot q + X \cdot Z \cdot p + Y \cdot Z \cdot o} = 0$$

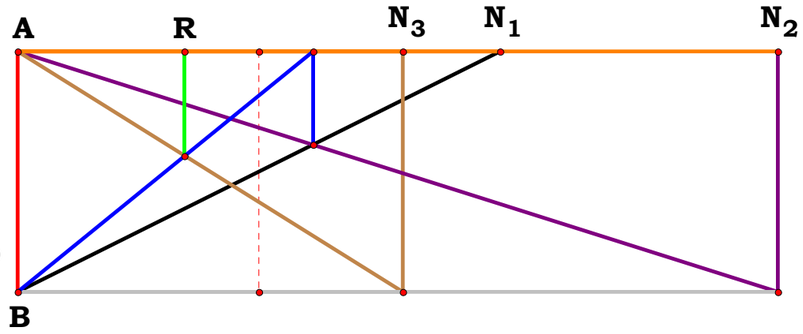
$N_1 = 2.00000$

$N_2 = 3.14641$

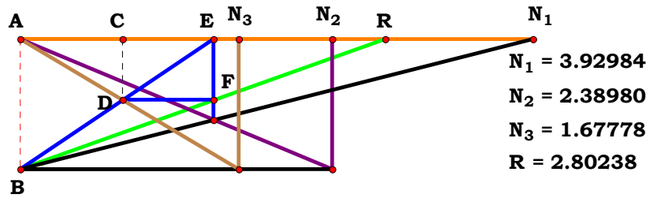
$N_3 = 1.59470$

$R = 0.69209$

$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 + N_1 \cdot N_3 + N_2 \cdot N_3} - R = 0.00000$



1CST2R2



$N_1 = 3.92984$

$N_2 = 2.38980$

$N_3 = 1.67778$

$R = 2.80238$

Unit. $AB := 1$ Given. $N_1 := 3.92984$ $N_2 := 2.38980$ $N_3 := 1.67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AE := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad AC := \frac{AE \cdot N_3}{AE + N_3}$$

$$CD := \frac{AC}{N_3} \qquad R := \frac{AE}{AB - CD}$$

$R = 2.802381$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 + N_2 \cdot N_3\right)}{N_3 \cdot \left(N_1 + N_2\right)^2} = 0$$

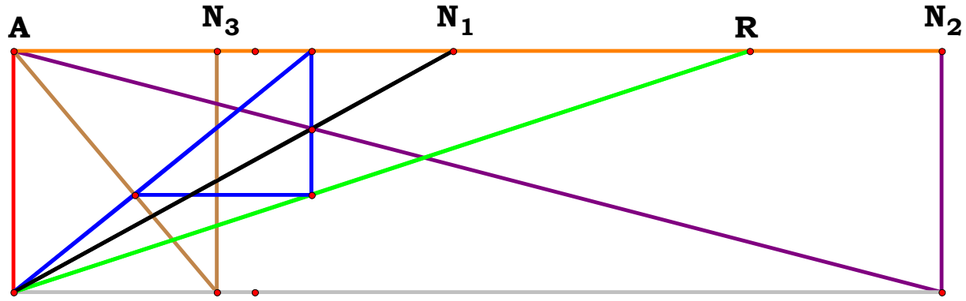
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + B + C)}{(A + B)^2} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Y \cdot (X \cdot Y \cdot q + X \cdot Z \cdot p + Y \cdot Z \cdot o)}{Z \cdot (X \cdot p + Y \cdot o)^2} = 0$$



B

$N_1 = 1.82222$

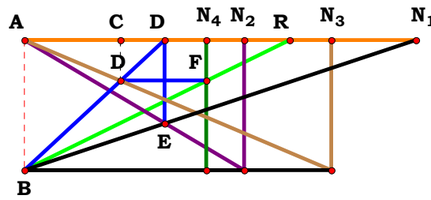
$N_2 = 3.84186$

$N_3 = 0.84173$

$R = 3.05087$

$$\frac{N_1 \cdot N_2 \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 + N_2 \cdot N_3\right)}{N_3 \cdot \left(N_1 + N_2\right)^2} - R = 0.00000$$

1CST2R3



$N_1 = 3.00000$
$N_2 = 1.68273$
$N_3 = 2.35578$
$N_4 = 1.39452$
$R = 2.03268$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.68273$ $N_3 := 2.35578$ $N_4 := 1.39452$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AD := \frac{N_1 \cdot N_2}{N_1 + N_2}$ $AC := \frac{AD \cdot N_3}{AD + N_3}$

$CD := \frac{AC}{N_3}$ $R := \frac{N_4}{AB - CD}$

$R = 2.032676$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot (N_2 + N_3) + N_2 \cdot N_3 \cdot N_4}{N_3 \cdot (N_1 + N_2)} = 0$$

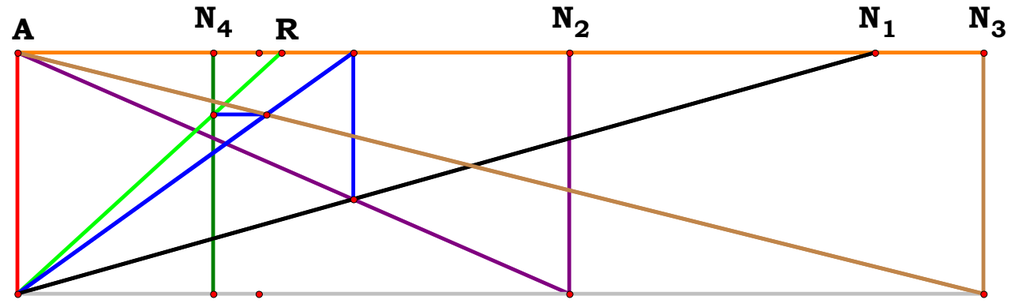
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (A + B + C)}{D \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

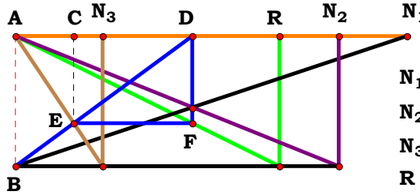
$$R - \frac{Z \cdot (W \cdot X \cdot o + W \cdot Y \cdot n + X \cdot Y \cdot m)}{Y \cdot p \cdot (W \cdot n + X \cdot m)} = 0$$



$N_1 = 3.55299$
$N_2 = 2.28364$
$N_3 = 4.00000$
$N_4 = 0.81164$
$R = 1.09371$

$\frac{N_1 \cdot N_4 \cdot (N_2 + N_3) + N_2 \cdot N_3 \cdot N_4}{N_3 \cdot (N_1 + N_2)} - R = 0.00000$

1CST2R4



$N_1 = 3.00000$

$N_2 = 2.47697$

$N_3 = 0.67045$

$R = 2.02721$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.47697$ $N_3 := .67045$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AD := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad AC := \frac{AD \cdot N_3}{AD + N_3}$$

$$CE := \frac{AC}{N_3} \qquad R := \frac{AD}{CE}$$

$R = 2.027206$

Definitions.

$$R - \frac{N_1 \cdot N_2 + N_3 \cdot (N_1 + N_2)}{N_1 + N_2} = 0$$

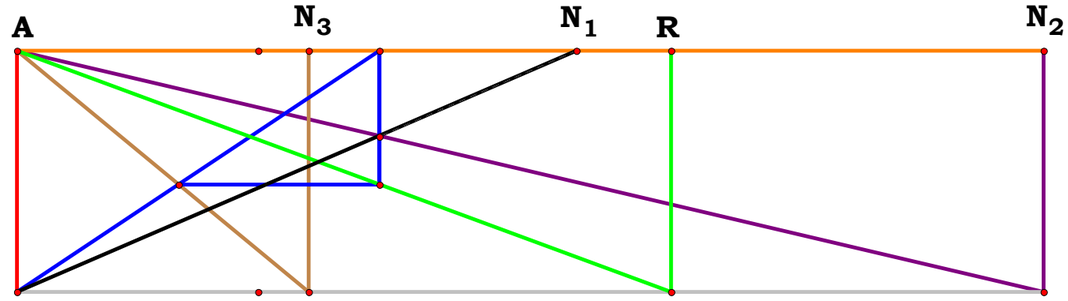
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + B + C)}{C \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Y \cdot q + X \cdot Z \cdot p + Y \cdot Z \cdot o}{q \cdot (X \cdot p + Y \cdot o)} = 0$$



$N_1 = 2.31896$

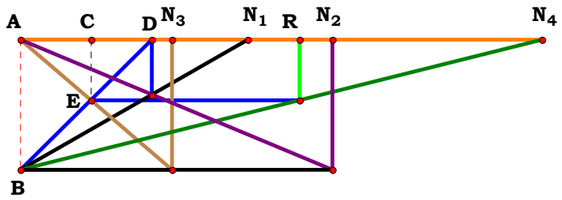
$N_2 = 4.24971$

$N_3 = 1.20776$

$R = 2.70805$

$\frac{N_1 \cdot N_2 + N_3 \cdot (N_1 + N_2)}{N_1 + N_2} - R = 0.00000$

1CST2R5



$N_1 = 1.74085$
$N_2 = 2.38980$
$N_3 = 1.16443$
$N_4 = 4.00000$
$R = 2.14483$

Unit. $AB := 1$ Given. $N_1 := 1.74085$ $N_2 := 2.38980$ $N_3 := 1.16443$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AD := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad AC := \frac{AD \cdot N_3}{AD + N_3}$$

$$CE := \frac{AC}{N_3} \qquad R := N_4 \cdot (AB - CE)$$

$R = 2.144829$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_1 \cdot N_2 + N_3 \cdot (N_1 + N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

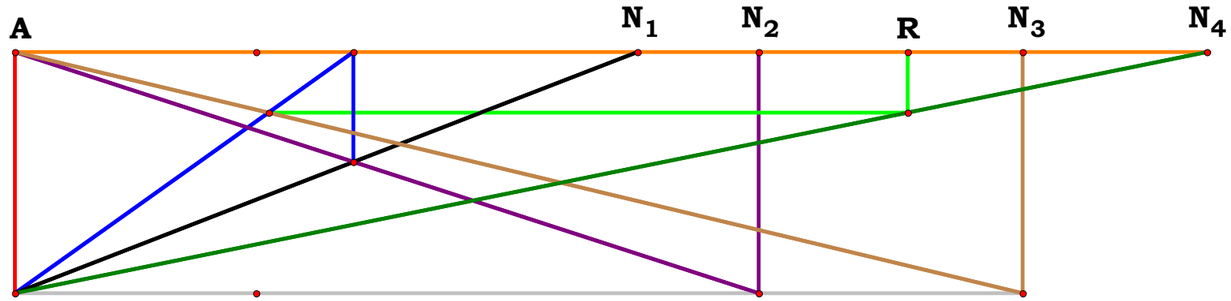
$$N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (A + B)}{D \cdot (A + B + C)} = 0$$

$$N_1 - \frac{W}{m} = 0 \qquad N_2 - \frac{X}{n} = 0$$

$$N_3 - \frac{Y}{o} = 0 \qquad N_4 - \frac{Z}{p} = 0$$

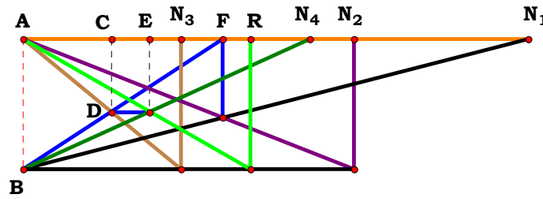
$$R - \frac{Y \cdot Z \cdot (W \cdot n + X \cdot m)}{p \cdot (W \cdot X \cdot o + W \cdot Y \cdot n + X \cdot Y \cdot m)} = 0$$



$N_1 = 2.58041$
$N_2 = 3.07843$
$N_3 = 4.17255$
$N_4 = 4.93725$
$R = 3.69437$

$$\frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_1 \cdot N_2 + N_3 \cdot (N_1 + N_2)} - R = 0.00000$$

1CST2R6



$N_1 = 3.87172$
$N_2 = 2.53508$
$N_3 = 1.21286$
$N_4 = 2.19844$
$R = 1.74049$

Unit. $AB := 1$ Given. $N_1 := 3.87172$ $N_2 := 2.53508$ $N_3 := 1.21286$ $N_4 := 2.19844$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AF := \frac{N_1 \cdot N_2}{N_1 + N_2}$ $AC := \frac{AF \cdot N_3}{AF + N_3}$

$CD := \frac{AC}{N_3}$ $AE := N_4 \cdot (AB - CD)$

$R := \frac{AE}{CD}$ $R = 1.740487$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_1 \cdot N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

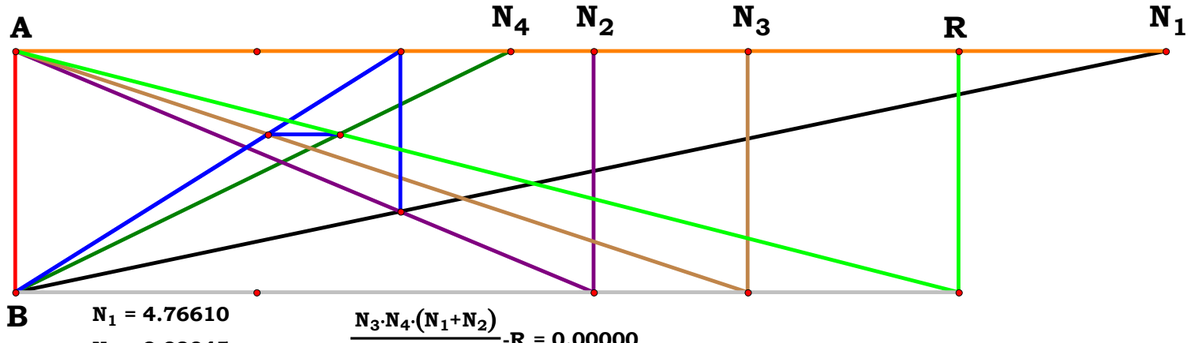
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (A + B)}{C \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

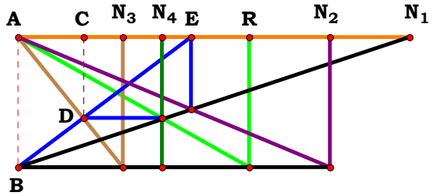
$R - \frac{Y \cdot Z \cdot (W \cdot n + X \cdot m)}{W \cdot X \cdot o \cdot p} = 0$



$N_1 = 4.76610$
$N_2 = 2.39345$
$N_3 = 3.03265$
$N_4 = 2.05089$
$R = 3.90358$

$\frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_1 \cdot N_2} - R = 0.00000$

1CST2R7



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 0.80606$
$N_4 = 1.10395$
$R = 1.77292$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.3898$ $N_3 := .80606$ $N_4 := 1.10395$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AE := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad AC := \frac{AE \cdot N_3}{AE + N_3}$$

$$CD := \frac{AC}{N_3} \qquad R := \frac{N_4}{CD}$$

$R = 1.77292$

Definitions.

$$R - \frac{N_4 \cdot \left[N_1 \cdot N_2 + N_3 \cdot \left(N_1 + N_2\right)\right]}{N_1 \cdot N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

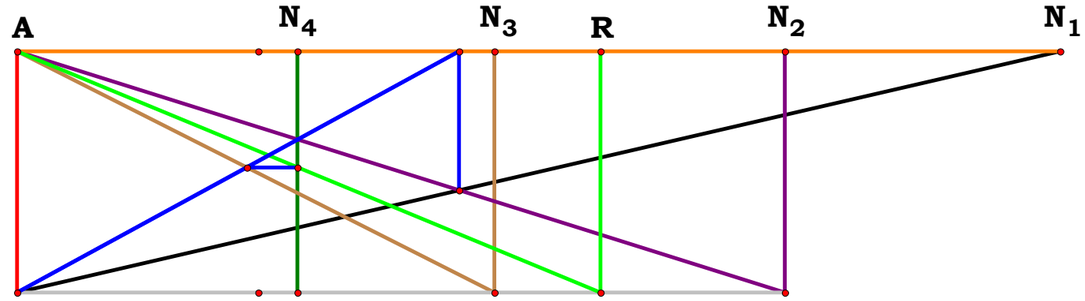
$$N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (A + B + C)}{C \cdot D} = 0$$

$$N_1 - \frac{W}{m} = 0 \qquad N_2 - \frac{X}{n} = 0$$

$$N_3 - \frac{Y}{o} = 0 \qquad N_4 - \frac{Z}{p} = 0$$

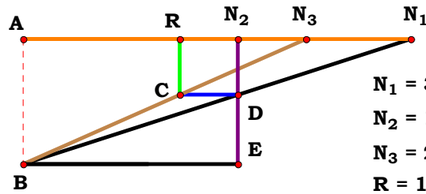
$$R - \frac{Z \cdot (W \cdot X \cdot o + W \cdot Y \cdot n + X \cdot Y \cdot m)}{W \cdot X \cdot o \cdot p} = 0$$



$N_1 = 4.32164$
$N_2 = 3.17778$
$N_3 = 1.97641$
$N_4 = 1.16197$
$R = 2.41606$

$\frac{N_4 \cdot (N_1 \cdot N_2 + N_3 \cdot (N_1 + N_2))}{N_1 \cdot N_2} - R = 0.00000$

1CST3R0



$N_1 = 3.10101$
$N_2 = 1.71717$
$N_3 = 2.26263$
$R = 1.25292$

Unit. $AB := 1$ **Given.** $N_1 := 3.10101$ $N_2 := 2.26263$ $N_3 := 1.71717$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$DE := \frac{N_2}{N_1}$ $CR := AB - DE$

$RN_3 := \frac{N_3 \cdot CR}{AB}$ $R := N_3 - RN_3$

$R = 1.252921$

Definitions.

$R - \frac{N_2 \cdot N_3}{N_1} = 0$

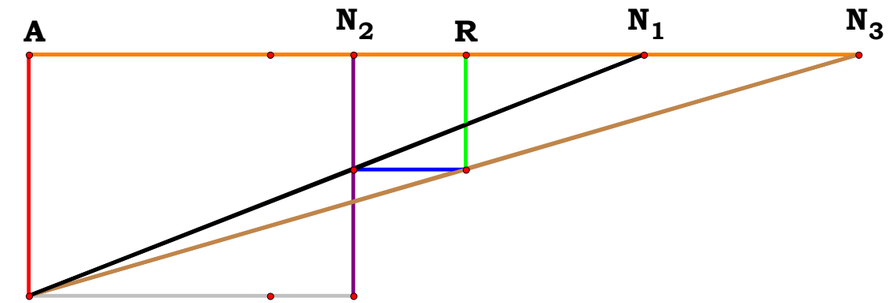
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot N_u}{B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

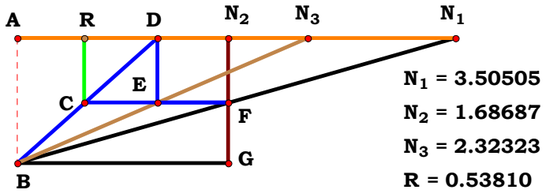
$R - \frac{Y \cdot Z \cdot o}{X \cdot p \cdot q} = 0$



$N_1 = 2.54904$
$N_2 = 1.34243$
$N_3 = 3.43528$
$R = 1.80916$

$\frac{N_2 \cdot N_3}{N_1} - R = 0.00000$

1CST3R1



$N_1 = 3.50505$
$N_2 = 1.68687$
$N_3 = 2.32323$
$R = 0.53810$

Unit. $AB := 1$ **Given.** $N_1 := 3.50505$ $N_2 := 1.68687$ $N_3 := 2.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AD := N_2 \cdot \frac{N_3}{N_1}$ $CR := \frac{N_1 - N_2}{N_1}$

$DR := \frac{AD \cdot CR}{AB}$ $R := AD - DR$

$R = 0.538105$

Definitions.

$R - \frac{N_2^2 \cdot N_3}{N_1^2} = 0$

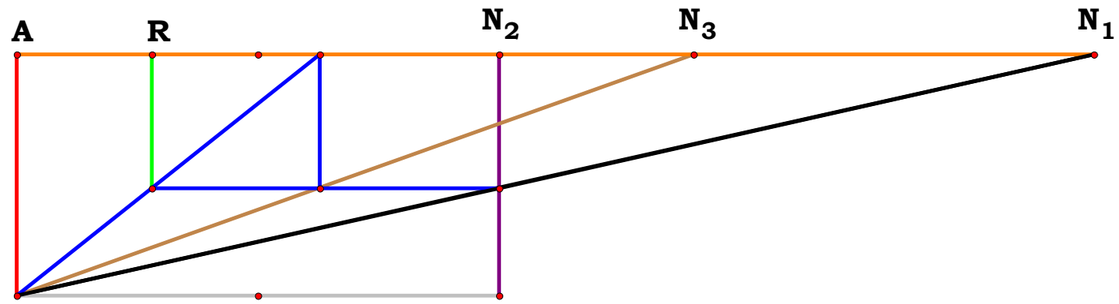
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$

$R - \frac{A^2 \cdot N_u}{B^2 \cdot C} = 0$

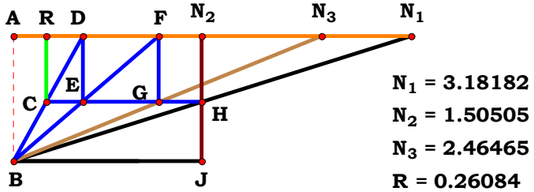
$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y^2 \cdot Z \cdot o^2}{X^2 \cdot p^2 \cdot q} = 0$



$N_1 = 4.46282$ $\frac{N_2^2 \cdot N_3}{N_1^2} - R = 0.00000$
$N_2 = 1.99605$
$N_3 = 2.80258$
$R = 0.56064$

1CST3R2



Unit. $AB := 1$ **Given.** $N_1 := 3.18182$ $N_2 := 1.50505$ $N_3 := 2.46465$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AD := \frac{N_2^{\,2} \cdot N_3}{N_1^{\,2}}$ $CR := \frac{N_1 - N_2}{N_1}$

$DR := \frac{AD \cdot CR}{AB}$ $R := AD - DR$

$R = 0.260844$

Definitions.

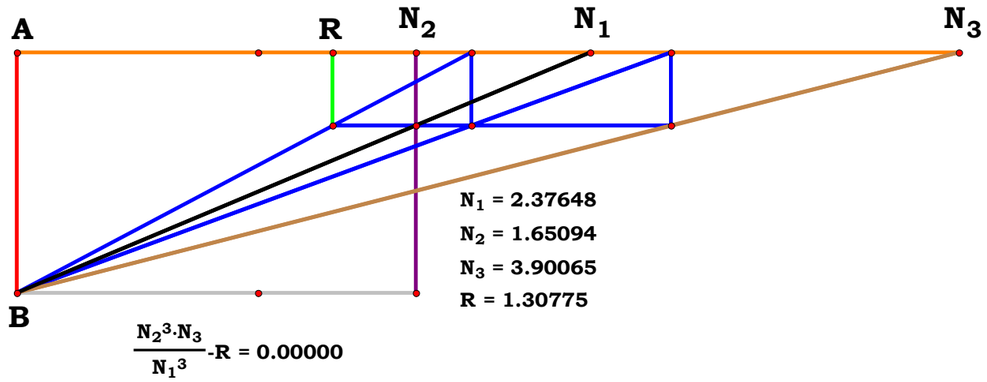
$R - \frac{N_2^{\,3} \cdot N_3}{N_1^{\,3}} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

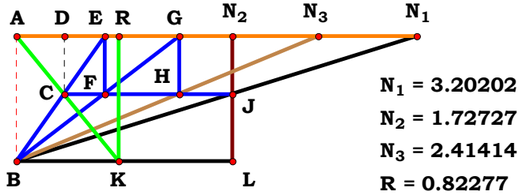
$R - \frac{A^3 \cdot N_u}{B^3 \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y^3 \cdot Z \cdot o^3}{X^3 \cdot p^3 \cdot q} = 0$



1CST3R3



$N_1 = 3.20202$
$N_2 = 1.72727$
$N_3 = 2.41414$
$R = 0.82277$

Unit. $AB := 1$ **Given.** $N_1 := 3.20202$ $N_2 := 1.72727$ $N_3 := 2.41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AD := \frac{N_2^3 \cdot N_3}{N_1^3}$ $CD := \frac{N_1 - N_2}{N_1}$

$R := \frac{AD \cdot AB}{CD}$ $R = 0.822767$

Definitions.

$$R - \frac{N_2^3 \cdot N_3}{N_1^2 \cdot (N_1 - N_2)} = 0$$

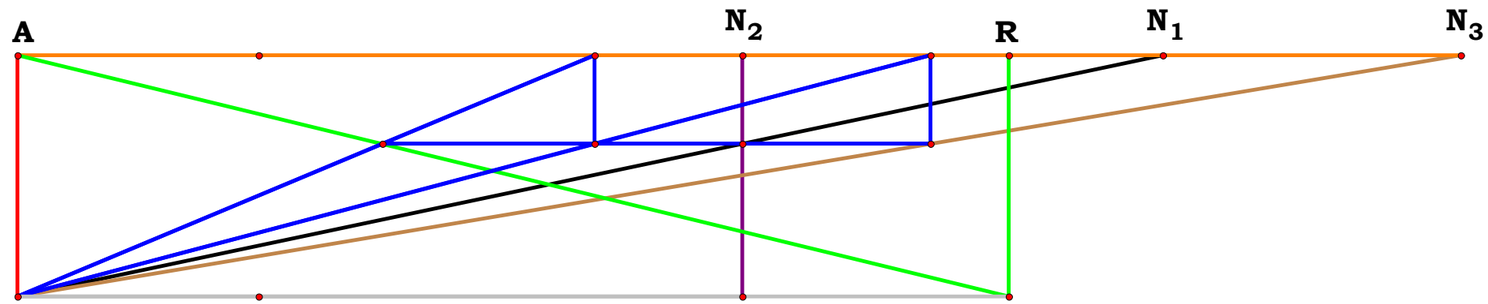
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$

$$R - \frac{A^3 \cdot N_u}{B^2 \cdot C \cdot (B - A)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

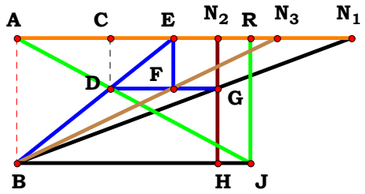
$$R - \frac{Y^3 \cdot Z \cdot o^3}{X^2 \cdot p^2 \cdot q \cdot (X \cdot p - Y \cdot o)} = 0$$



$N_1 = 4.74518$
$N_2 = 3.00000$
$N_3 = 5.97653$
$R = 4.10645$

$\frac{N_2^3 \cdot N_3}{N_1^2 \cdot (N_1 - N_2)} - R = 0.00000$

1CST3R4



$N_1 = 2.67677$
$N_2 = 1.60606$
$N_3 = 2.08081$
$R = 1.87273$

Unit. $AB := 1$ Given. $N_1 := 2.67677$ $N_2 := 1.60606$ $N_3 := 2.08081$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CD := \frac{N_1 - N_2}{N_1}$ $AC := \frac{N_2^2 \cdot N_3}{N_1^2}$

$R := \frac{AC \cdot AB}{CD}$ $R = 1.872721$

Definitions.

$R - \frac{N_2^2 \cdot N_3}{N_1 \cdot (N_1 - N_2)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

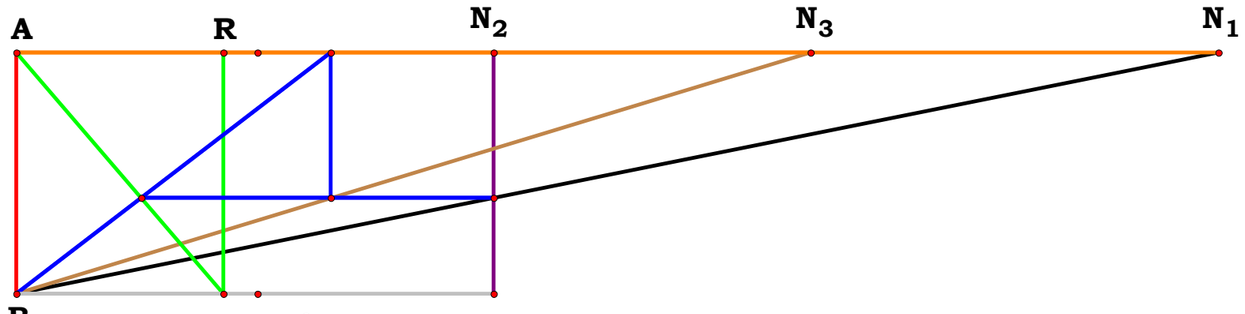
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{A^2 \cdot N_u}{C \cdot (B^2 - A \cdot B)} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

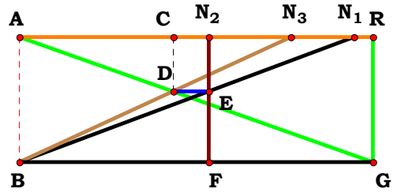
$R - \frac{Y^2 \cdot Z \cdot o^2}{X \cdot p \cdot q \cdot (X \cdot p - Y \cdot o)} = 0$



$N_1 = 4.98048$
$N_2 = 1.97513$
$N_3 = 3.28887$
$R = 0.85718$

$\frac{N_2^2 \cdot N_3}{N_1 \cdot (N_1 - N_2)} - R = 0.00000$

1CST3R5



$N_1 = 2.67677$
$N_2 = 1.51515$
$N_3 = 2.17172$
$R = 2.83267$

Unit. $AB := 1$ Given. $N_1 := 2.67677$ $N_2 := 1.51515$ $N_3 := 2.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 \cdot N_3}{N_1}$ $CD := \frac{N_1 - N_2}{N_1}$

$R := \frac{AC}{CD}$ $R = 2.832666$

Definitions.

$R - \frac{N_2 \cdot N_3}{N_1 - N_2} = 0$

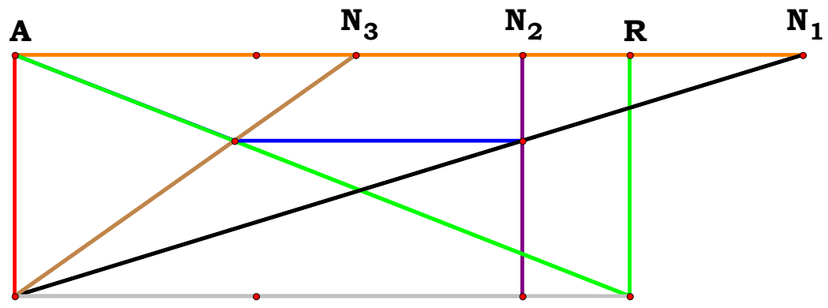
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot N_u}{C \cdot (B - A)} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

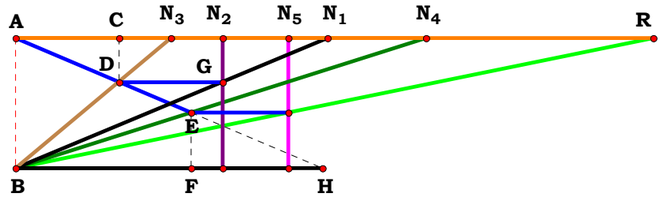
$R - \frac{Y \cdot Z \cdot o}{q \cdot (X \cdot p - Y \cdot o)} = 0$



$N_1 = 3.26540$
$N_2 = 2.10063$
$N_3 = 1.41168$
$R = 2.54592$

$\frac{N_2 \cdot N_3}{N_1 - N_2} - R = 0.00000$

1CST3R6



$N_1 = 2.38980$
$N_2 = 1.58588$
$N_3 = 1.19349$
$N_4 = 3.14765$
$N_5 = 2.09213$
$R = 4.88919$

Unit. $AB := 1$ Given. $N_1 := 2.38980$ $N_2 := 1.58588$ $N_3 := 1.19349$

$N_4 := 3.14765$ $N_5 := 2.09213$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$GN_2 := AB - \frac{N_2}{N_1}$ $CN_3 := N_3 \cdot GN_2$

$AC := N_3 - CN_3$ $BH := \frac{AC}{GN_2}$

$BF := \frac{BH \cdot N_4}{BH + N_4}$ $EF := \frac{BF}{N_4}$

$R := \frac{N_5}{EF}$ $R = 4.889171$

Definitions.

$$R - \frac{N_5 \cdot \left[N_1 \cdot N_4 + N_2 \cdot \left(N_3 - N_4\right)\right]}{N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

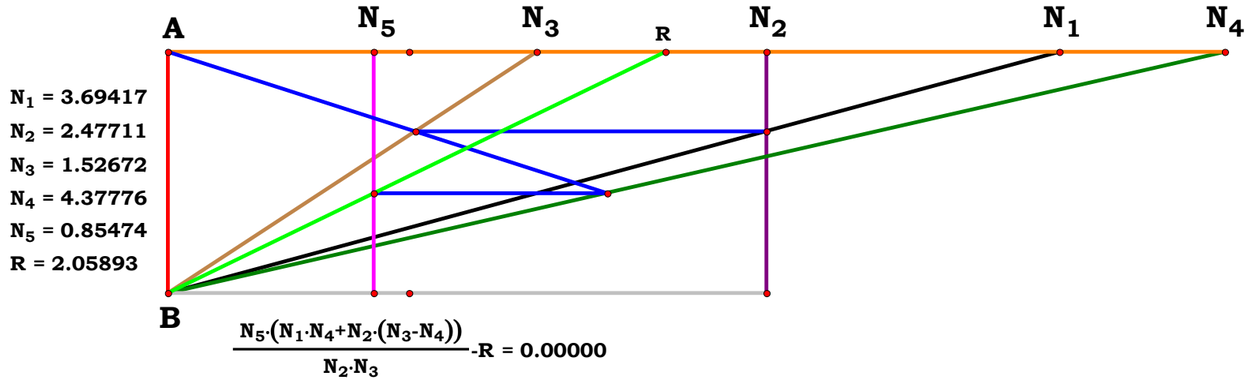
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (A \cdot D - A \cdot C + B \cdot C)}{A \cdot D \cdot E} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

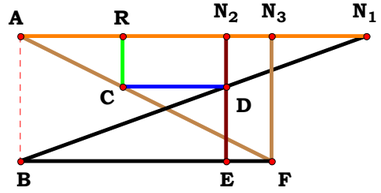
$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n + W \cdot X \cdot l \cdot o - W \cdot Y \cdot l \cdot n)}{W \cdot X \cdot l \cdot o \cdot p} = 0$$



$N_1 = 3.69417$
$N_2 = 2.47711$
$N_3 = 1.52672$
$N_4 = 4.37776$
$N_5 = 0.85474$
$R = 2.05893$

$\frac{N_5 \cdot (N_1 \cdot N_4 + N_2 \cdot (N_3 - N_4))}{N_2 \cdot N_3} - R = 0.00000$

1CST4R0



$N_1 = 2.76768$
$N_2 = 1.64646$
$N_3 = 2.01010$
$R = 0.81431$

Unit. $AB := 1$ **Given.** $N_1 := 2.76768$ $N_2 := 1.64646$ $N_3 := 2.01010$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$DN := 1 - \frac{N_2}{N_1}$ $R := \frac{N_3 \cdot DN}{AB}$

$R = 0.814315$

Definitions.

$$R - \frac{N_3 \cdot (N_1 - N_2)}{N_1} = 0$$

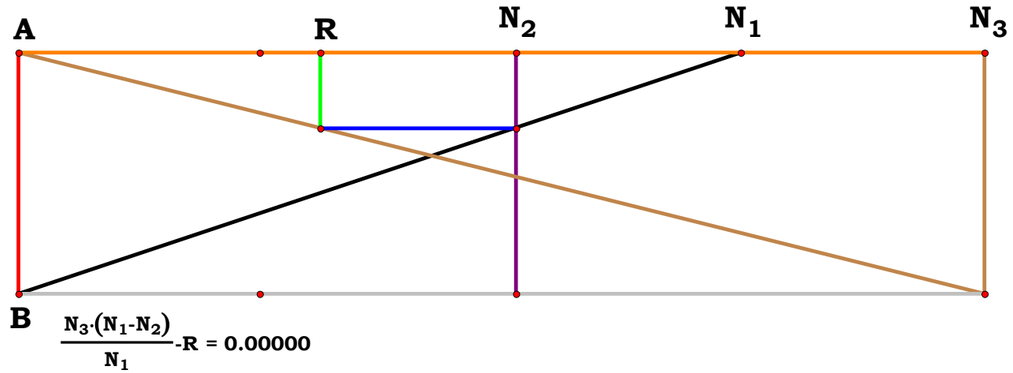
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (B - A)}{B \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

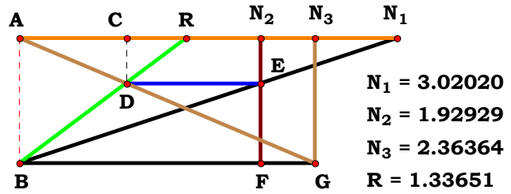
$$R - \frac{Z \cdot (X \cdot p - Y \cdot o)}{X \cdot p \cdot q} = 0$$



$N_1 = 2.99349$
$N_2 = 2.05879$
$N_3 = 4.00000$
$R = 1.24898$

$\frac{N_3 \cdot (N_1 - N_2)}{N_1} - R = 0.00000$

1CST4R1



Unit. $AB := 1$ **Given.** $N_1 := 3.02020$ $N_2 := 1.92929$ $N_3 := 2.36364$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CD := \frac{N_1 - N_2}{N_1}$ $AC := \frac{N_3 \cdot (N_1 - N_2)}{N_1}$

$R := \frac{AC}{AB - CD}$

$R = 1.336512$

Definitions.

$R - \frac{N_3 \cdot (N_1 - N_2)}{N_2} = 0$

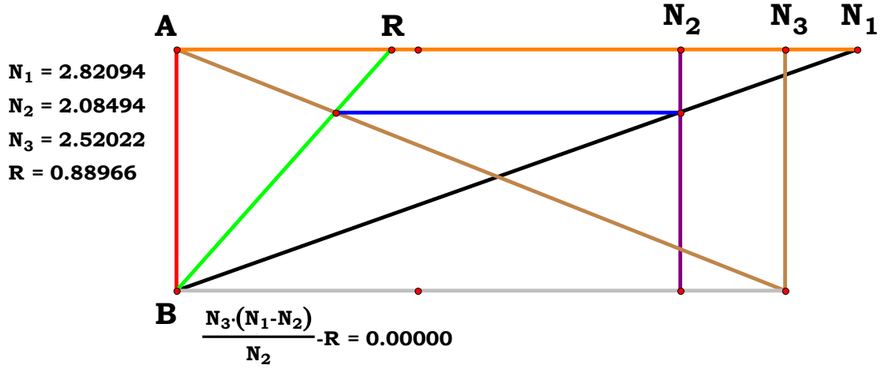
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$

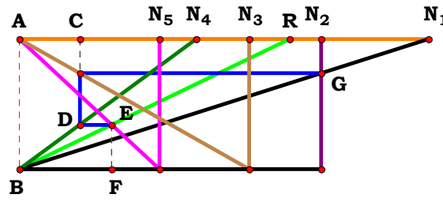
$R - \frac{N_u \cdot (B - A)}{A \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot (X \cdot p - Y \cdot o)}{Y \cdot o \cdot q} = 0$



1CST4R2



$N_1 = 3.13560$
$N_2 = 2.31231$
$N_3 = 1.76495$
$N_4 = 1.35578$
$N_5 = 1.07512$
$R = 2.07033$

Unit. $AB := 1$ Given. $N_1 := 3.13560$ $N_2 := 2.31231$ $N_3 := 1.76495$ $N_4 := 1.35578$ $N_5 := 1.07512$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$GN_2 := AB - \frac{N_2}{N_1}$ $AC := N_3 \cdot GN_2$

$CD := \frac{N_4 - AC}{N_4}$ $BF := N_5 \cdot CD$

$R := \frac{BF}{AB - CD}$ $R = 2.070321$

Definitions.

$$R - \frac{N_5 \cdot \left[N_1 \cdot \left(N_4 - N_3\right) + N_2 \cdot N_3\right]}{N_3 \cdot \left(N_1 - N_2\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

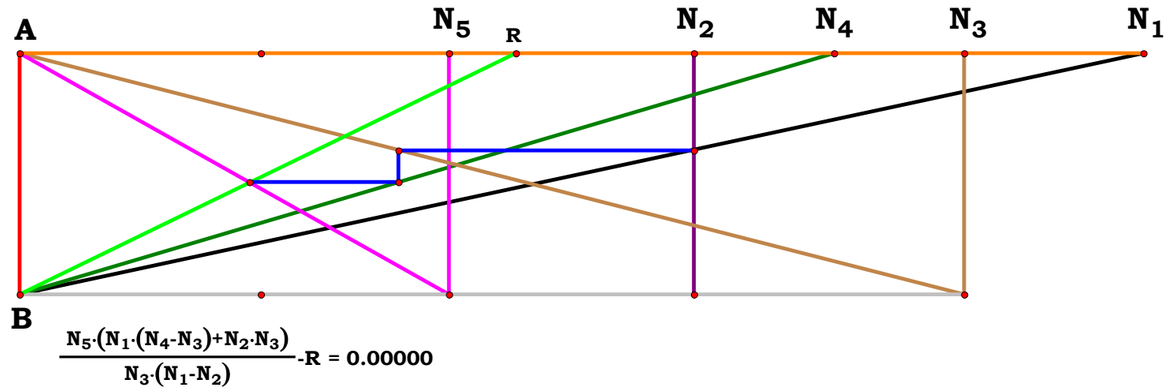
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (A \cdot D + B \cdot C - B \cdot D)}{D \cdot E \cdot (B - A)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

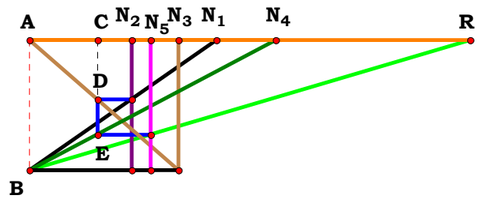
$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - V \cdot X \cdot m \cdot o + W \cdot X \cdot l \cdot o)}{X \cdot o \cdot p \cdot (V \cdot m - W \cdot l)} = 0$$



$N_1 = 4.65629$
$N_2 = 2.79084$
$N_3 = 3.91111$
$N_4 = 3.37381$
$N_5 = 1.78026$
$R = 2.05294$

$\frac{N_5 \cdot (N_1 \cdot (N_4 - N_3) + N_2 \cdot N_3)}{N_3 \cdot (N_1 - N_2)} - R = 0.00000$

1CST4R3



$N_1 = 1.43090$
$N_2 = 0.78196$
$N_3 = 1.14506$
$N_4 = 1.88850$
$N_5 = 0.92984$
$R = 3.38140$

Unit. $AB := 1$ Given. $N_1 := 1.43090$ $N_2 := .78196$ $N_3 := 1.14506$ $N_4 := 1.88850$ $N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$CD := AB - \frac{N_2}{N_1}$ $AC := N_3 \cdot CD$

$CE := \frac{N_4 - AC}{N_4}$ $R := \frac{N_5}{AB - CE}$

$R = 3.38144$

Definitions.

$R - \frac{N_1 \cdot N_4 \cdot N_5}{N_1 \cdot N_3 - N_2 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

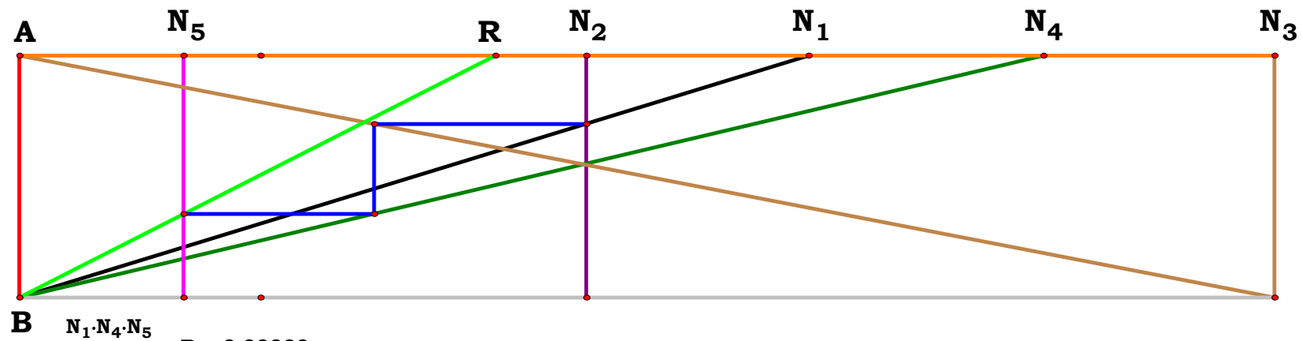
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{B \cdot C \cdot N_u}{D \cdot E \cdot (B - A)} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

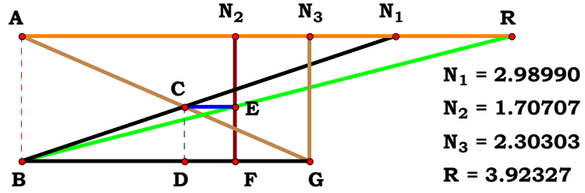
$R - \frac{V \cdot Y \cdot Z \cdot m \cdot n}{X \cdot o \cdot p \cdot (V \cdot m - W \cdot l)} = 0$



$N_1 = 3.27063$
$N_2 = 2.34639$
$N_3 = 5.19742$
$N_4 = 4.24181$
$N_5 = 0.68219$
$R = 1.97021$

$\frac{N_1 \cdot N_4 \cdot N_5}{N_1 \cdot N_3 - N_2 \cdot N_3} - R = 0.00000$

1CST4R4



$N_1 = 2.98990$
$N_2 = 1.70707$
$N_3 = 2.30303$
$R = 3.92327$

Unit. $AB := 1$ **Given.** $N_1 := 2.98990$ $N_2 := 1.70707$ $N_3 := 2.30303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$CD := \frac{N_3}{N_1 + N_3} \qquad R := \frac{N_2}{CD}$$

$R = 3.923267$

Definitions.

$$R - \frac{N_2 \cdot (N_1 + N_3)}{N_3} = 0$$

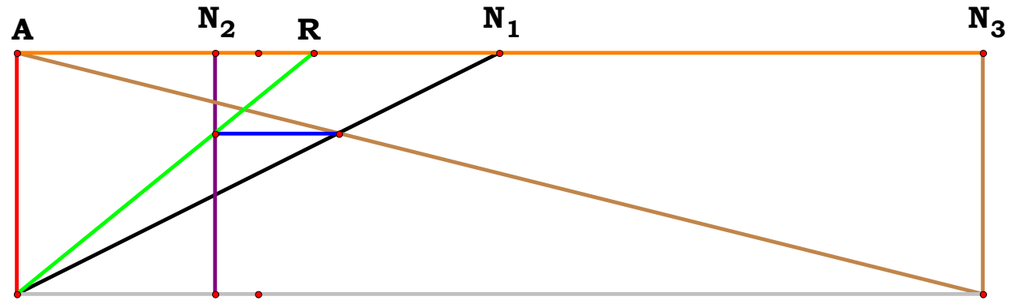
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + C)}{A \cdot B} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

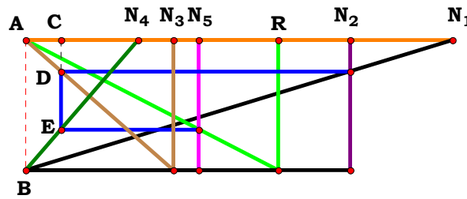
$$R - \frac{Y \cdot (X \cdot q + Z \cdot o)}{Z \cdot o \cdot p} = 0$$



$N_1 = 2.00000$
$N_2 = 0.81954$
$N_3 = 4.00000$
$R = 1.22931$

B $\frac{N_2 \cdot (N_1 + N_3)}{N_3} - R = 0.00000$

1CST4R5



$N_1 = 3.27120$
$N_2 = 2.48665$
$N_3 = 1.13537$
$N_4 = 0.86181$
$N_5 = 1.32695$
$R = 1.93989$

Unit. $AB := 1$ **Given.** $N_1 := 3.27120$ $N_2 := 2.48665$ $N_3 := 1.13537$ $N_4 := .86181$

$N_5 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$CD := AB - \frac{N_2}{N_1}$ $AC := N_3 \cdot CD$

$CE := \frac{N_4 - AC}{N_4}$ $R := \frac{N_5}{CE}$

$R = 1.939887$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5}{N_1 \cdot N_4 - N_3 \cdot (N_1 - N_2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

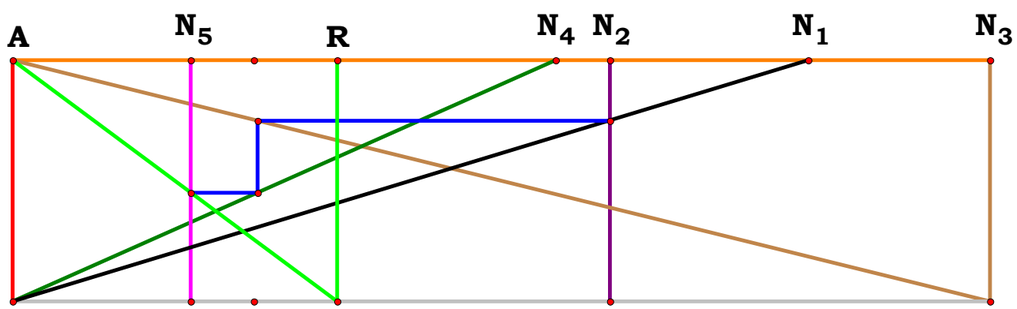
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot C \cdot N_u}{E \cdot (A \cdot D + B \cdot C - B \cdot D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

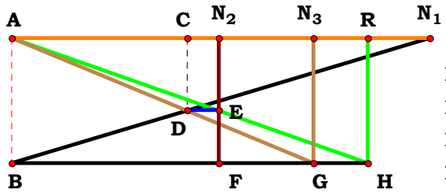
$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot n}{p \cdot (V \cdot Y \cdot m \cdot n - V \cdot X \cdot m \cdot o + W \cdot X \cdot l \cdot o)} = 0$$



$N_1 = 3.29677$
$N_2 = 2.47188$
$N_3 = 4.04706$
$N_4 = 2.24959$
$N_5 = 0.73971$
$R = 1.34526$

B $\frac{N_1 \cdot N_4 \cdot N_5}{N_1 \cdot N_4 - N_3 \cdot (N_1 - N_2)} - R = 0.00000$

1CST4R6



$N_1 = 3.34343$
$N_2 = 1.65657$
$N_3 = 2.41414$
$R = 2.85270$

Unit. $AB := 1$ Given. $N_1 := 3.34343$ $N_2 := 1.65657$ $N_3 := 2.41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$CD := \frac{N_1}{N_1 + N_3} \qquad R := \frac{N_2}{CD}$$

$R = 2.852704$

Definitions.

$$R - \frac{N_2 \cdot (N_1 + N_3)}{N_1} = 0$$

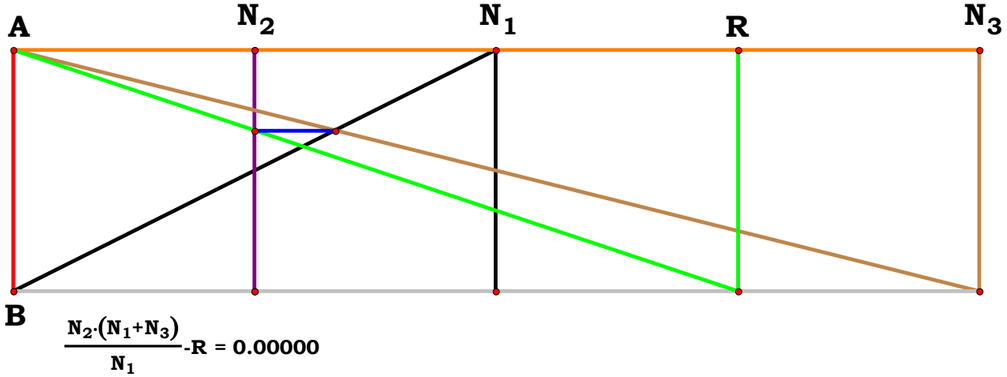
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + C)}{B \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

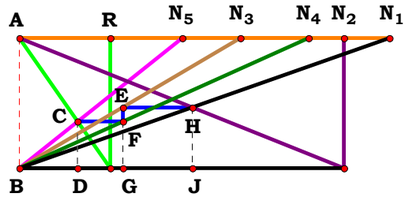
$$R - \frac{Y \cdot (X \cdot q + Z \cdot o)}{X \cdot p \cdot q} = 0$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$R = 3.00000$

$\frac{N_2 \cdot (N_1 + N_3)}{N_1} - R = 0.00000$

1CST5R0



$N_1 = 2.83534$
$N_2 = 2.48665$
$N_3 = 1.69715$
$N_4 = 2.21782$
$N_5 = 1.24947$
$R = 0.69538$

Unit. $AB := 1$ **Given.** $N_1 := 2.83534$ $N_2 := 2.48665$ $N_3 := 1.69715$ $N_4 := 2.21782$ $N_5 := 1.24947$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$BJ := \frac{N_1 \cdot N_2}{N_1 + N_2}$ $HJ := \frac{BJ}{N_1}$

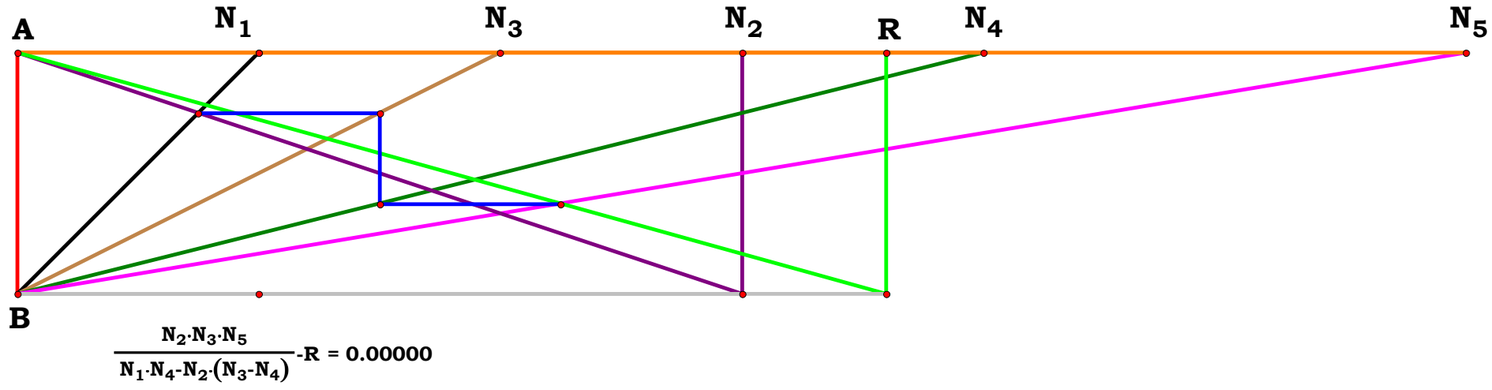
$BG := N_3 \cdot HJ$ $FG := \frac{BG}{N_4}$

$BD := N_5 \cdot FG$ $R := \frac{BD}{AB - FG}$

$R = 0.695376$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot N_5}{N_1 \cdot N_4 - N_2 \cdot (N_3 - N_4)} = 0$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$N_5 = 6.00000$
$R = 3.60000$

$\frac{N_2 \cdot N_3 \cdot N_5}{N_1 \cdot N_4 - N_2 \cdot (N_3 - N_4)} - R = 0.00000$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

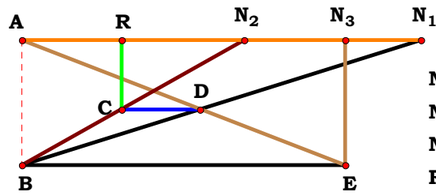
$$R - \frac{A \cdot D \cdot N_u}{E \cdot (A \cdot C - A \cdot D + B \cdot C)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot l \cdot o}{p \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)} = 0$$

1CST5R1



$N_1 = 3.19192$
$N_2 = 1.77778$
$N_3 = 2.58586$
$R = 0.79565$

Unit. $AB := 1$ **Given.** $N_1 := 3.19192$ $N_2 := 1.77778$ $N_3 := 2.58586$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$CH := \frac{N_1}{N_1 + N_3}$ $RN := N_2 \cdot CH$

$R := N_2 - RN$ $R = 0.79565$

Definitions.

$R - \frac{N_2 \cdot N_3}{N_1 + N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

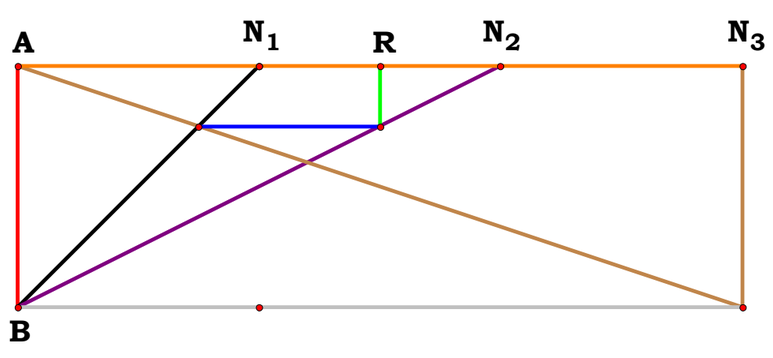
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot N_u}{B \cdot (A + C)} = 0$

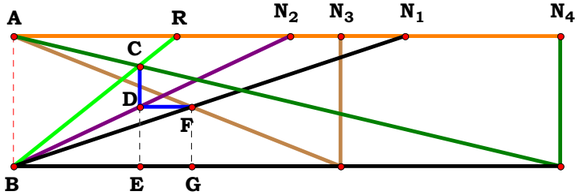
$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot o}{X \cdot p \cdot q + Z \cdot o \cdot p} = 0$

$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$R = 1.50000$
$\frac{N_2 \cdot N_3}{N_1 + N_3} - R = 0.00000$



1CST5R2



$N_1 = 3.00000$
$N_2 = 2.11859$
$N_3 = 2.51075$
$N_4 = 4.19372$
$R = 1.25385$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.11859$ $N_3 := 2.51075$ $N_4 := 4.19372$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BG := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $FG := \frac{BG}{N_1}$

$BE := N_2 \cdot FG$ $CE := \frac{N_4 - BE}{N_4}$

$R := \frac{BE}{CE}$ $R = 1.253841$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_3 \cdot (N_2 - N_4)} = 0$$

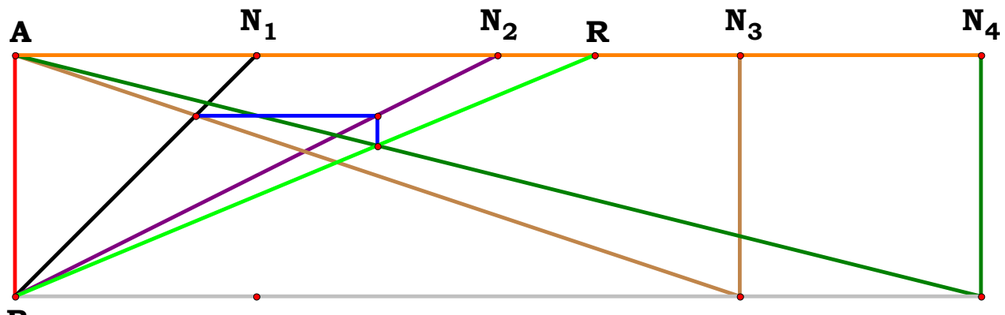
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot N_u}{A \cdot B - A \cdot D + B \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

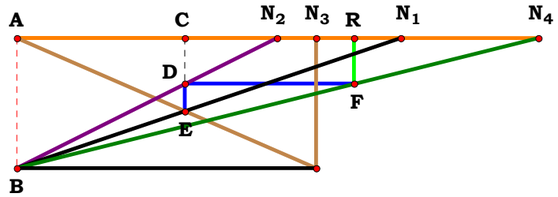
$$R - \frac{X \cdot Y \cdot Z \cdot m}{W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + Y \cdot Z \cdot m \cdot n} = 0$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 2.40000$

$\frac{N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_3 \cdot (N_2 - N_4)} - R = 0.00000$

1CST5R3



$N_1 = 2.94189$
$N_2 = 1.99268$
$N_3 = 2.29767$
$N_4 = 4.00000$
$R = 2.58965$

Unit. $AB := 1$ **Given.** $N_1 := 2.94189$ $N_2 := 1.99268$ $N_3 := 2.29767$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $CD := AB - \frac{AC}{N_2}$

$RN_4 := N_4 \cdot CD$ $R := N_4 - RN_4$

$R = 2.589654$

Definitions.

$R - \frac{N_1 \cdot N_3 \cdot N_4}{N_2 \cdot (N_1 + N_3)} = 0$

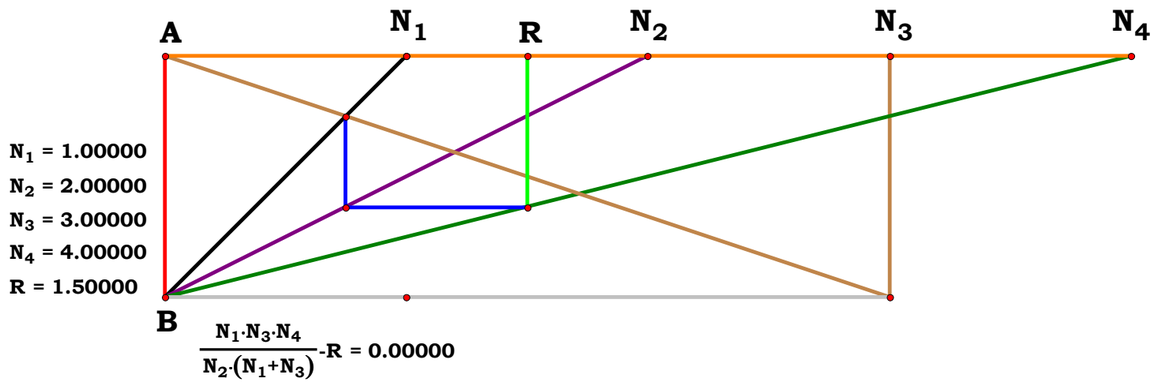
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{B \cdot N_u}{D \cdot (A + C)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

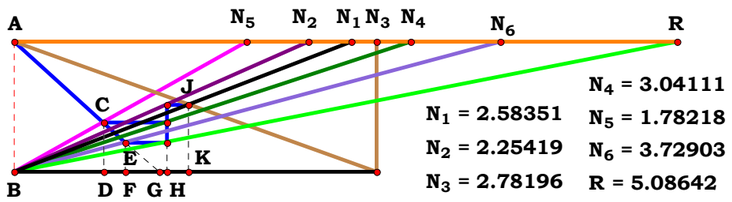
$R - \frac{W \cdot Y \cdot Z \cdot n}{X \cdot p \cdot (W \cdot o + Y \cdot m)} = 0$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 1.50000$

$\frac{N_1 \cdot N_3 \cdot N_4}{N_2 \cdot (N_1 + N_3)} - R = 0.00000$

1CST5R4



$N_4 = 3.04111$
$N_1 = 2.58351$ $N_5 = 1.78218$
$N_2 = 2.25419$ $N_6 = 3.72903$
$N_3 = 2.78196$ $R = 5.08642$

Unit. $AB := 1$ Given. $N_1 := 2.58351$ $N_2 := 2.25419$ $N_3 := 2.78196$ $N_4 := 3.04111$

$N_5 := 1.78218$ $N_6 := 3.72903$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

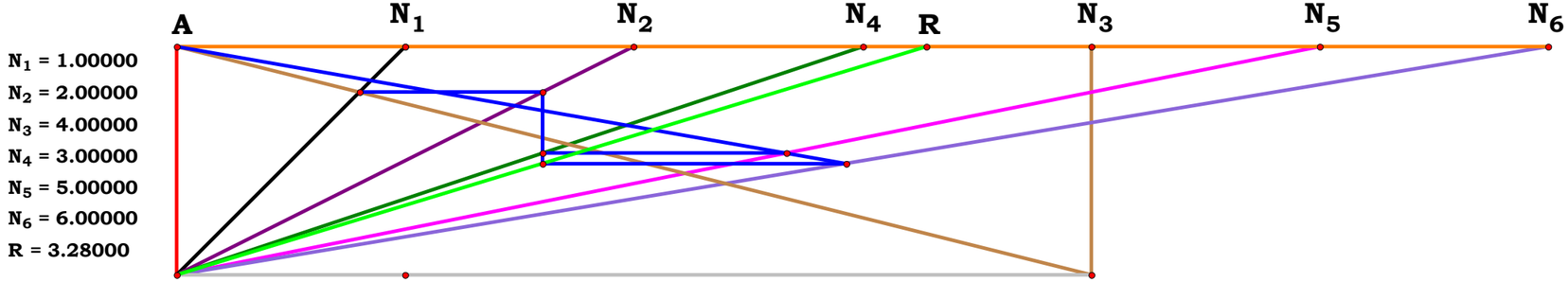
$BK := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $JK := AB - \frac{N_1 - BK}{N_1}$

$BH := N_2 \cdot JK$ $CD := AB - \frac{N_4 - BH}{N_4}$

$BD := N_5 \cdot CD$ $BG := \frac{BD}{AB - CD}$

$BF := \frac{BG \cdot N_6}{BG + N_6}$ $EF := \frac{BF}{N_6}$

$R := \frac{BH}{EF}$ $R = 5.086437$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 5.00000$
$N_6 = 6.00000$
$R = 3.28000$

Definitions.

$R - \frac{N_2 \cdot N_3 \cdot N_5 + N_6 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_3 \cdot N_4)}{N_5 \cdot (N_1 + N_3)} = 0$

B $\frac{N_2 \cdot N_3 \cdot N_5 + N_6 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_3 \cdot N_4)}{N_5 \cdot (N_1 + N_3)} - R = 0.00000$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

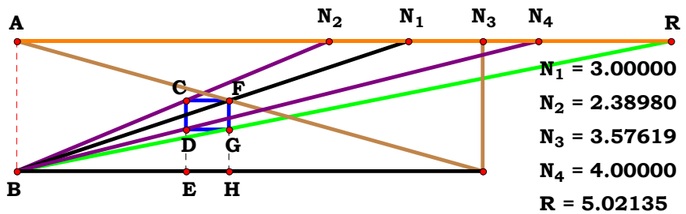
$R - \frac{N_u \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]}{B \cdot D \cdot F \cdot (A + C)} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{U \cdot X \cdot Z \cdot l \cdot m \cdot o + V \cdot W \cdot Y \cdot k \cdot n \cdot p - V \cdot W \cdot Z \cdot k \cdot n \cdot o + W \cdot X \cdot Z \cdot k \cdot l \cdot o}{Y \cdot l \cdot n \cdot p \cdot (U \cdot m + W \cdot k)} = 0$

1CST5R5



Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 3.57619$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ An invisible Variable.

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BH := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $FH := \frac{BH}{N_1}$

$BE := N_2 \cdot FH$ $DE := \frac{BE}{N_4}$

$R := \frac{BH}{DE}$ $R = 5.021341$

Definitions.

$R - \frac{N_1 \cdot N_4}{N_2} = 0$

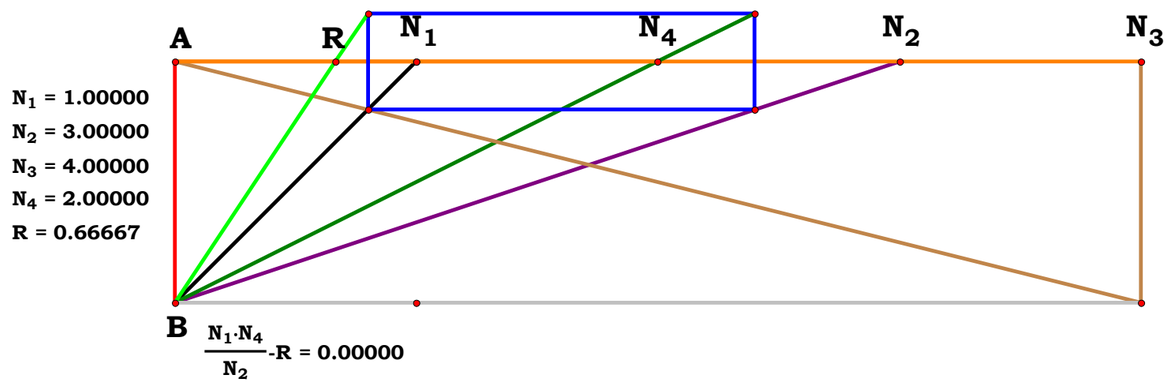
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

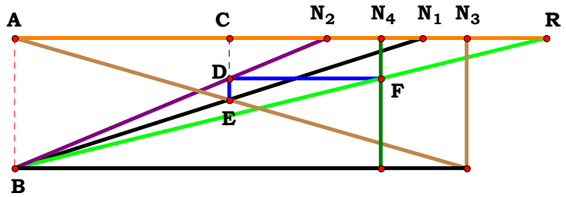
$R - \frac{B \cdot N_u}{A \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Z \cdot n}{X \cdot m \cdot p} = 0$



1CST5R6



$N_1 = 3.12592$
$N_2 = 2.38980$
$N_3 = 3.46965$
$N_4 = 2.80865$
$R = 4.08176$

Unit. $AB := 1$ Given. $N_1 := 3.12592$ $N_2 := 2.38980$ $N_3 := 3.46965$ $N_4 := 2.80865$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $CD := \frac{N_2 - AC}{N_2}$

$R := \frac{N_4}{AB - CD}$ $R = 4.081765$

Definitions.

$R - \frac{N_2 \cdot N_4 \cdot (N_1 + N_3)}{N_1 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

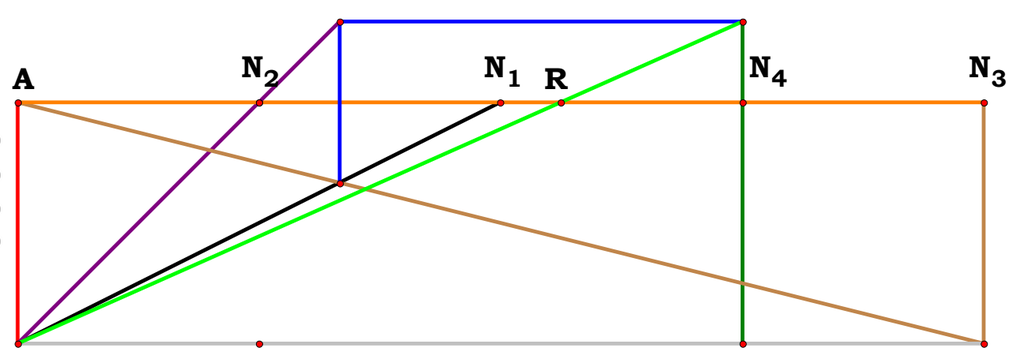
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (A + C)}{B \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

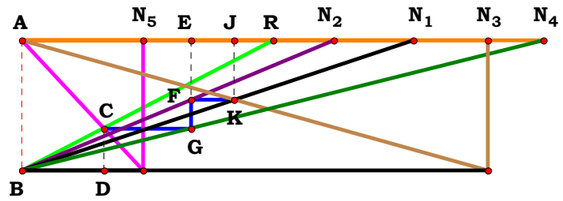
$R - \frac{X \cdot Z \cdot (W \cdot o + Y \cdot m)}{W \cdot Y \cdot n \cdot p} = 0$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 2.25000$

B $\frac{N_2 \cdot N_4 \cdot (N_1 + N_3)}{N_1 \cdot N_3} - R = 0.00000$

1CST5R7



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 3.57619$
$N_4 = 4.00000$
$N_5 = 0.92984$
$R = 1.93209$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 3.57619$ $N_4 := 4$

$N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AJ := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $JK := \frac{AJ}{N_3}$

$AE := N_2 \cdot (AB - JK)$ $CD := \frac{AE}{N_4}$

$BD := N_5 \cdot (AB - CD)$ $R := \frac{BD}{CD}$

$R = 1.932099$

Definitions.

$$R - \frac{N_5 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3 + N_3 \cdot N_4\right)}{N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

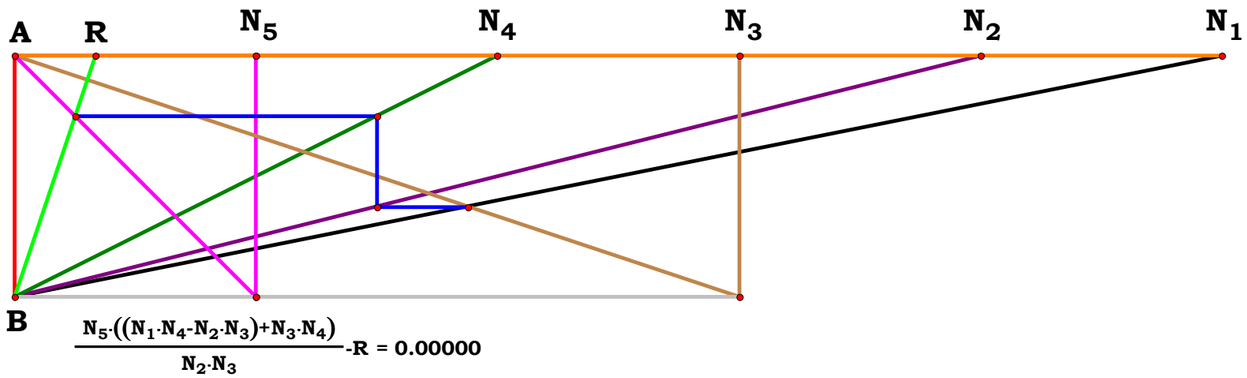
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot E} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

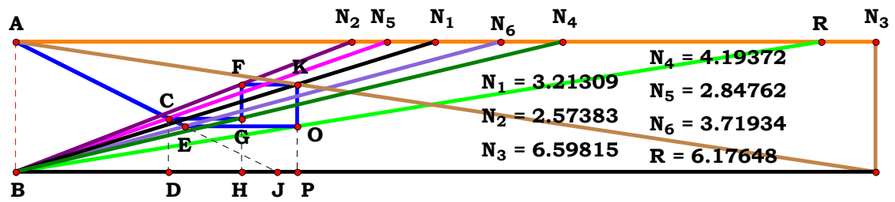
$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + X \cdot Y \cdot l \cdot m)}{W \cdot X \cdot l \cdot o \cdot p} = 0$$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 0.33333$

$$\frac{N_5 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_3 \cdot N_4)}{N_2 \cdot N_3} - R = 0.00000$$

1CST5R8



Unit. $AB := 1$ **Given.** $N_1 := 3.21309$ $N_2 := 2.57383$ $N_3 := 6.59815$

$N_4 := 4.19372$ $N_5 := 2.84762$ $N_6 := 3.71934$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

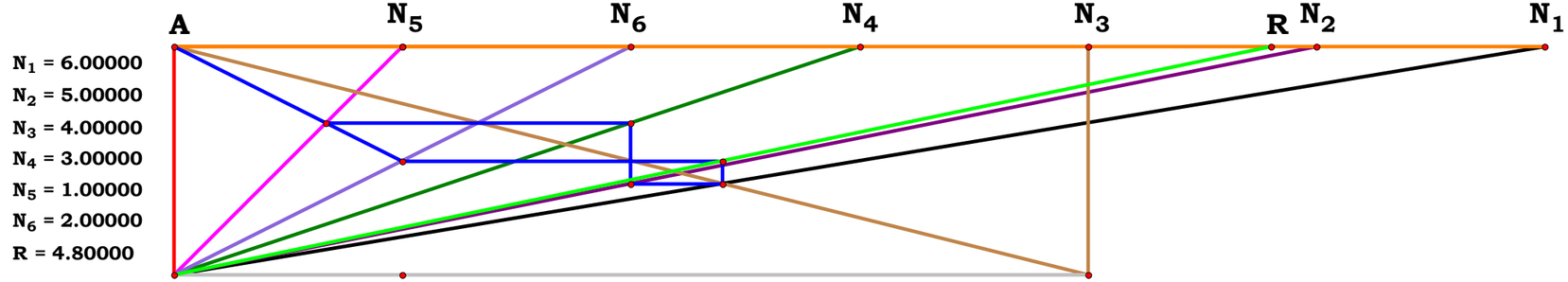
$BP := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $KP := \frac{BP}{N_1}$

$BH := N_2 \cdot KP$ $GH := \frac{BH}{N_4}$

$BD := N_5 \cdot GH$ $BJ := \frac{BD}{AB - GH}$

$OP := \frac{BJ}{BJ + N_6}$ $R := \frac{BP}{OP}$

$R = 6.176477$



Definitions.

$$R - \frac{N_1 \cdot \left[N_2 \cdot N_3 \cdot \left(N_5 - N_6\right) + N_4 \cdot N_6 \cdot \left(N_1 + N_3\right)\right]}{N_2 \cdot N_5 \cdot \left(N_1 + N_3\right)} = 0$$

B $\frac{N_1 \cdot (N_2 \cdot N_3 \cdot (N_5 - N_6) + N_4 \cdot N_6 \cdot (N_1 + N_3))}{N_2 \cdot N_5 \cdot (N_1 + N_3)} - R = 0.00000$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot [A \cdot E \cdot (B - D) + B \cdot C \cdot E + A \cdot D \cdot F]}{A \cdot D \cdot F \cdot (A + C)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{U \cdot (U \cdot X \cdot Z \cdot l \cdot m \cdot o + V \cdot W \cdot Y \cdot k \cdot n \cdot p - V \cdot W \cdot Z \cdot k \cdot n \cdot o + W \cdot X \cdot Z \cdot k \cdot l \cdot o)}{V \cdot Y \cdot k \cdot n \cdot p \cdot (U \cdot m + W \cdot k)} = 0$$

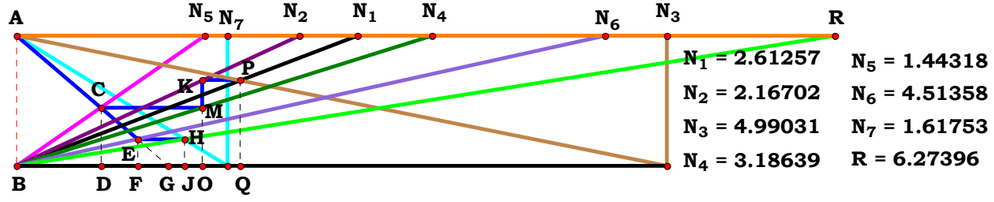
1CST5R9

Unit. $AB := 1$ Given. $N_1 := 2.61257$ $N_2 := 2.16702$ $N_3 := 4.99031$ $N_4 := 3.18639$

$N_5 := 1.44318$ $N_6 := 4.51358$ $N_7 := 1.61753$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.



$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

$BQ := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $KO := \frac{BQ}{N_1}$

$BO := N_2 \cdot KO$ $MO := \frac{BO}{N_4}$

$BD := N_5 \cdot MO$ $BG := \frac{BD}{AB - MO}$

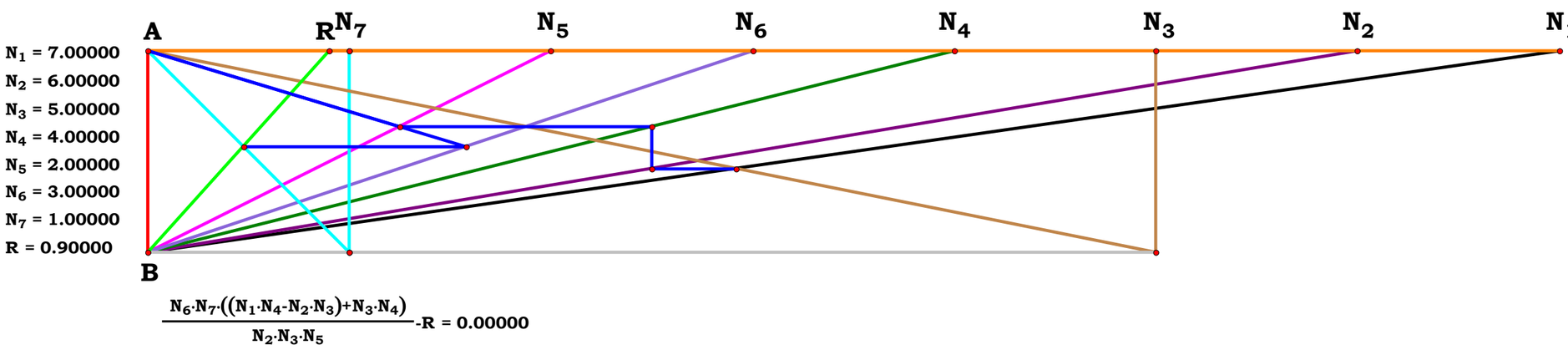
$BF := \frac{BG \cdot N_6}{BG + N_6}$

$EF := \frac{BF}{N_6}$

$BJ := N_7 \cdot (AB - EF)$

$R := \frac{BJ}{EF}$

$R = 6.273998$



$\frac{N_6 \cdot N_7 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_3 \cdot N_4)}{N_2 \cdot N_3 \cdot N_5} - R = 0.00000$

Definitions.

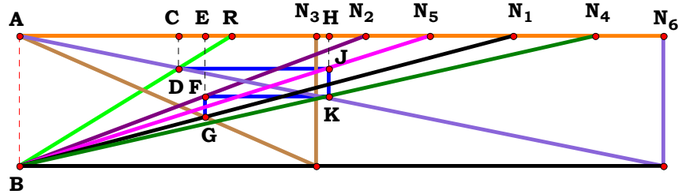
$R - \frac{N_6 \cdot N_7 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_3 \cdot N_4)}{N_2 \cdot N_3 \cdot N_5} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$R - \frac{E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot F \cdot G} = 0$ $N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot n \cdot (T \cdot W \cdot k \cdot l - U \cdot V \cdot j \cdot m + V \cdot W \cdot j \cdot k)}{U \cdot V \cdot X \cdot j \cdot m \cdot o \cdot p} = 0$

1CST5R10

Unit. $AB := 1$ Given. $N_1 := 3.78455$ $N_2 := 2.65131$ $N_3 := 2.27829$ $N_4 := 4.41649$ $N_5 := 3.14788$ $N_6 := 4.93975$



$N_1 = 3.78455$ $N_5 = 3.14788$
$N_2 = 2.65131$ $N_6 = 4.93975$
$N_3 = 2.27829$ $R = 1.62411$
$N_4 = 4.41649$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AE := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $EF := \frac{AE}{N_2}$

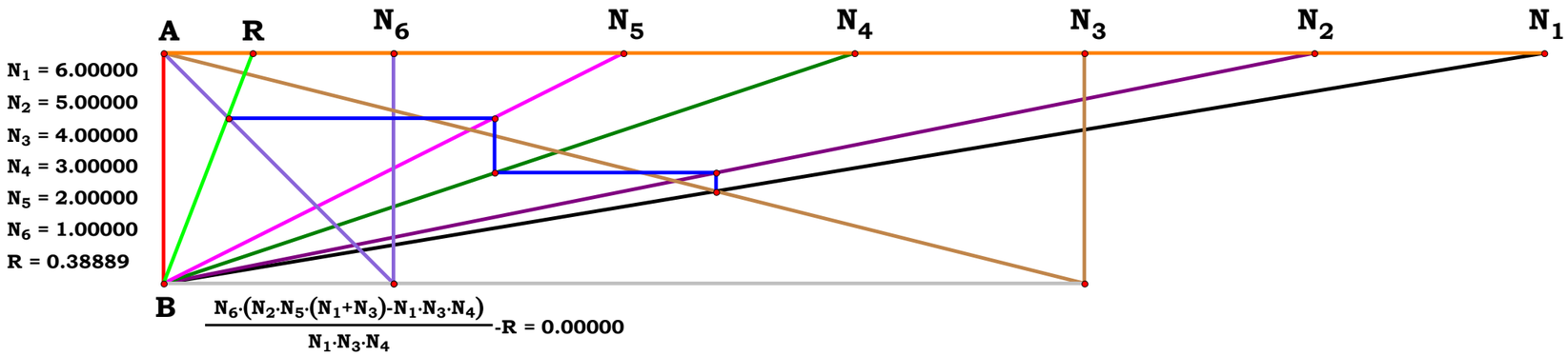
$AH := N_4 \cdot EF$ $HJ := AB - \frac{AH}{N_5}$

$AC := N_6 \cdot HJ$ $R := \frac{AC}{AB - HJ}$

$R = 1.624109$

Definitions.

$$R - \frac{N_6 \cdot \left[N_2 \cdot N_5 \cdot \left(N_1 + N_3\right) - N_1 \cdot N_3 \cdot N_4\right]}{N_1 \cdot N_3 \cdot N_4} = 0$$



$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

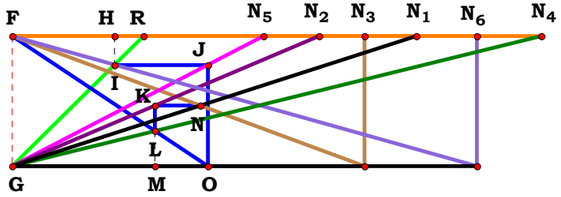
$$R - \frac{N_u \cdot (A \cdot D - B \cdot E + C \cdot D)}{B \cdot E \cdot F} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0$$

$$N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot (U \cdot V \cdot Y \cdot m \cdot n - U \cdot W \cdot X \cdot l \cdot o + V \cdot W \cdot Y \cdot k \cdot n)}{U \cdot W \cdot X \cdot l \cdot o \cdot p} = 0$$

1CST5R11



$N_1 = 3.09686$ $N_5 = 1.92747$
$N_2 = 2.35105$ $N_6 = 3.56437$
$N_3 = 2.70447$ $R = 1.01103$
$N_4 = 4.05811$

Unit. $AB := 1$ Given. $N_1 := 3.09686$ $N_2 := 2.35105$ $N_3 := 2.70447$

$N_4 := 4.05811$ $N_5 := 1.92747$ $N_6 := 3.56437$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$KM := \frac{N_3}{N_1 + N_3}$ $GM := N_2 \cdot KM$

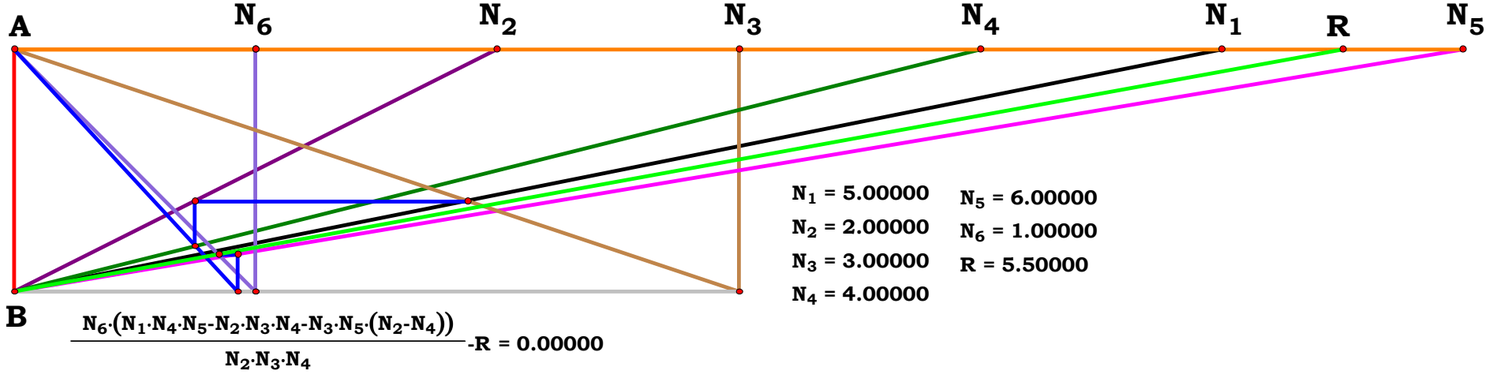
$LM := \frac{GM}{N_4}$ $GO := \frac{GM}{AB - LM}$

$JO := \frac{GO}{N_5}$ $FH := N_6 \cdot (AB - JO)$

$R := \frac{FH}{JO}$ $R = 1.011031$

Definitions.

$$R - \frac{N_6 \cdot \left[N_1 \cdot N_4 \cdot N_5 - N_2 \cdot N_3 \cdot N_4 - N_3 \cdot N_5 \cdot \left(N_2 - N_4\right)\right]}{N_2 \cdot N_3 \cdot N_4} = 0$$



$N_1 = 5.00000$ $N_5 = 6.00000$
$N_2 = 2.00000$ $N_6 = 1.00000$
$N_3 = 3.00000$ $R = 5.50000$
$N_4 = 4.00000$

$$\frac{N_6 \cdot (N_1 \cdot N_4 \cdot N_5 - N_2 \cdot N_3 \cdot N_4 - N_3 \cdot N_5 \cdot (N_2 - N_4))}{N_2 \cdot N_3 \cdot N_4} - R = 0.00000$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

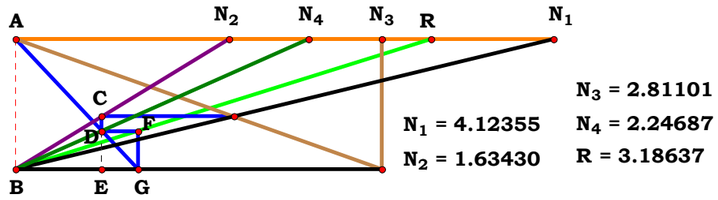
$$R - \frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)}{A \cdot E \cdot F} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (U \cdot X \cdot Y \cdot l \cdot m - V \cdot W \cdot X \cdot k \cdot o - V \cdot W \cdot Y \cdot k \cdot n + W \cdot X \cdot Y \cdot k \cdot l)}{V \cdot W \cdot X \cdot k \cdot o \cdot p} = 0$$

1CST5R12



Unit. $AB := 1$ **Given.** $N_1 := 4.12355$ $N_2 := 1.63430$ $N_3 := 2.81101$ $N_4 := 2.24687$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$CE := \frac{N_3}{N_1 + N_3}$ $BE := N_2 \cdot CE$

$DE := \frac{BE}{N_4}$ $BG := \frac{BE}{AB - DE}$

$R := \frac{BG}{DE}$ $R = 3.18636$

Definitions.

$$R - \frac{N_4^{\,2} \cdot (N_1 + N_3)}{N_1 \cdot N_4 - N_2 \cdot N_3 + N_3 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

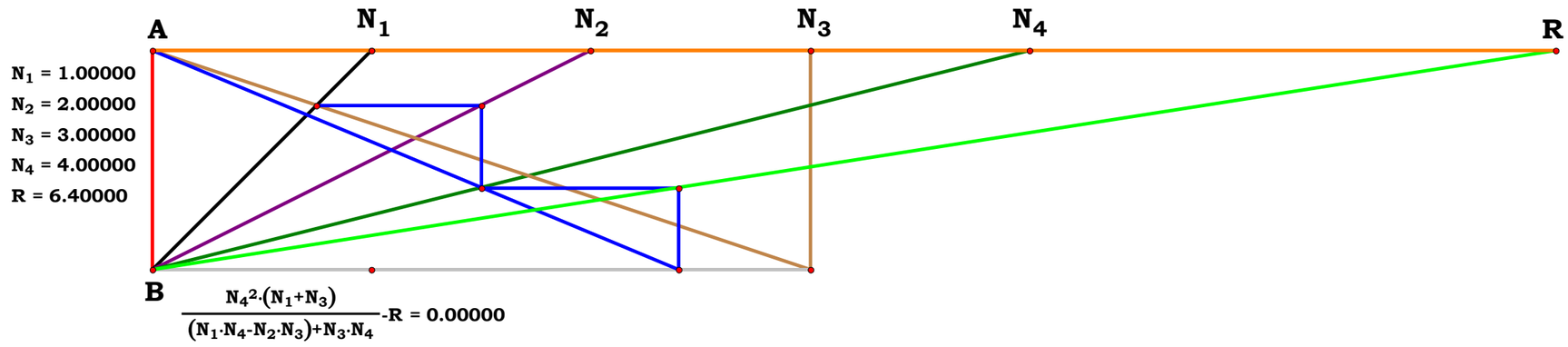
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot N_u \cdot (A + C)}{D \cdot (A \cdot B - A \cdot D + B \cdot C)} = 0$$

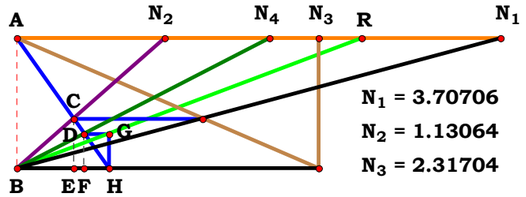
$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Z^2 \cdot n \cdot (W \cdot o + Y \cdot m)}{p \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + Y \cdot Z \cdot m \cdot n)} = 0$$



1CST5R13



$N_1 = 3.70706$ $N_4 = 1.93693$
$N_2 = 1.13064$ $R = 2.64362$
$N_3 = 2.31704$

Unit. $AB := 1$ **Given.** $N_1 := 3.70706$ $N_2 := 1.13064$ $N_3 := 2.31704$ $N_4 := 1.93693$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$CE := \frac{N_3}{N_1 + N_3}$ $BE := N_2 \cdot CE$

$BH := \frac{BE}{AB - CE}$ $DF := \frac{BH}{BH + N_4}$

$R := \frac{BH}{DF}$ $R = 2.643619$

Definitions.

$R - \frac{N_1 \cdot N_4 + N_2 \cdot N_3}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

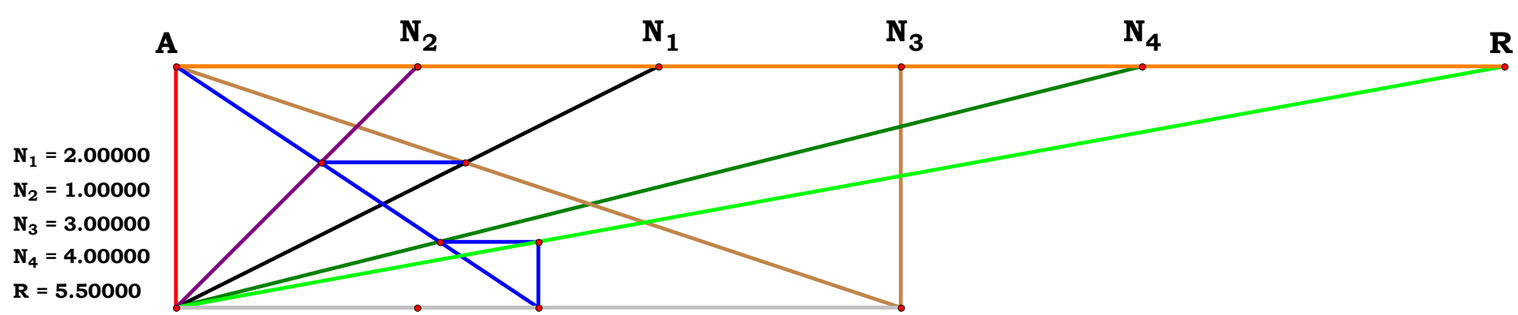
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (A \cdot D + B \cdot C)}{B \cdot C \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Z \cdot n \cdot o + X \cdot Y \cdot m \cdot p}{W \cdot n \cdot o \cdot p} = 0$

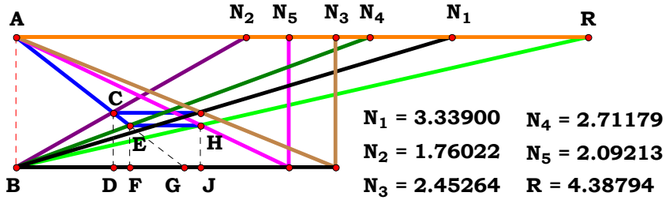


$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 5.50000$

B

$\frac{N_1 \cdot N_4 + N_2 \cdot N_3}{N_1} - R = 0.00000$

1CST5R14



$N_1 = 3.33900$ $N_4 = 2.71179$
$N_2 = 1.76022$ $N_5 = 2.09213$
$N_3 = 2.45264$ $R = 4.38794$

Unit. $AB := 1$ Given. $N_1 := 3.33900$ $N_2 := 1.76022$ $N_3 := 2.45264$

$N_4 := 2.71179$ $N_5 := 2.09213$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$CD := \frac{N_3}{N_1 + N_3}$ $BD := N_2 \cdot CD$

$BG := \frac{BD}{AB - CD}$ $EF := \frac{BG}{BG + N_4}$

$BJ := N_5 \cdot (AB - EF)$ $R := \frac{BJ}{EF}$

$R = 4.387937$

Definitions.

$R - \frac{N_1 \cdot N_4 \cdot N_5}{N_2 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

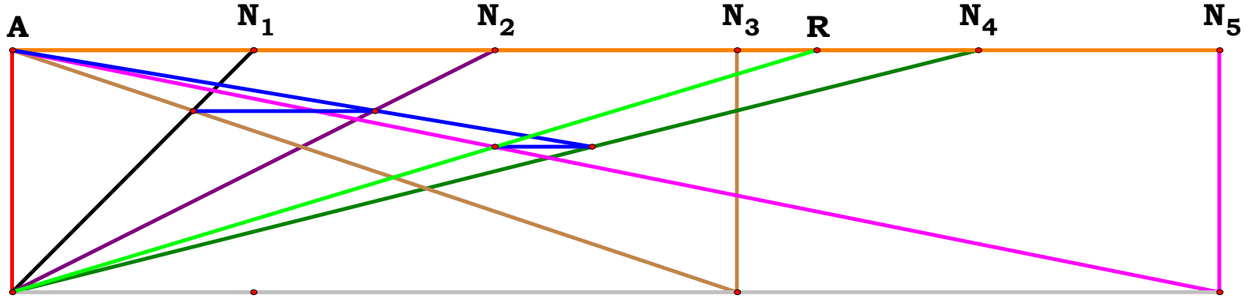
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{B \cdot C \cdot N_u}{A \cdot D \cdot E} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

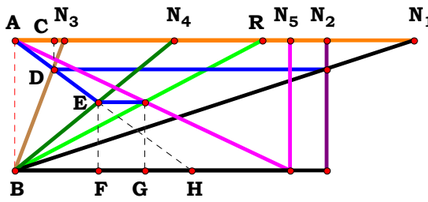
$R - \frac{V \cdot Y \cdot Z \cdot m \cdot n}{W \cdot X \cdot l \cdot o \cdot p} = 0$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 3.33333$

B $\frac{N_1 \cdot N_4 \cdot N_5}{N_2 \cdot N_3} - R = 0.00000$

1CST6R0



$N_1 = 3.05811$
$N_2 = 2.38980$
$N_3 = 0.37988$
$N_4 = 1.22018$
$N_5 = 2.11150$
$R = 1.89667$

Unit. $AB := 1$ **Given.** $N_1 := 3.05811$ $N_2 := 2.38980$ $N_3 := .37988$

$N_4 := 1.22018$ $N_5 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$CD := AB - \frac{N_2}{N_1}$ $AC := N_3 \cdot (AB - CD)$

$BH := \frac{AC}{CD}$ $EF := \frac{BH}{BH + N_4}$

$BG := N_5 \cdot (AB - EF)$ $R := \frac{BG}{EF}$

$R = 1.89664$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 - N_2)}{N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

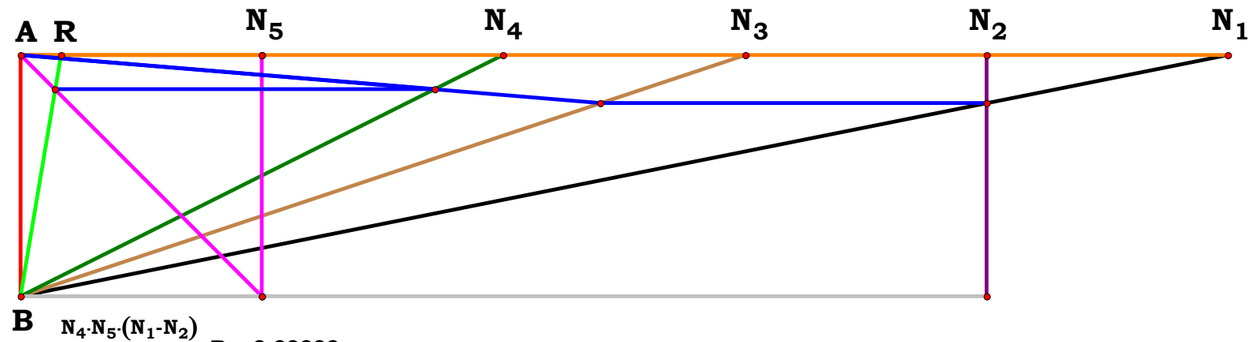
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{C \cdot N_u \cdot (B - A)}{A \cdot D \cdot E} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

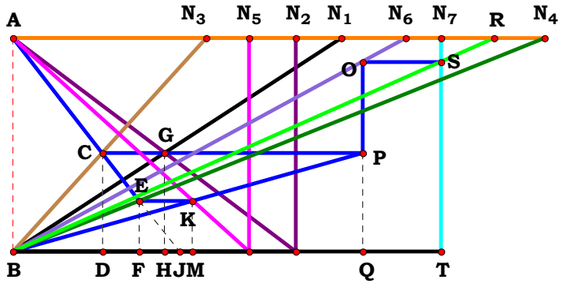
$$R - \frac{Y \cdot Z \cdot n \cdot (V \cdot m - W \cdot l)}{W \cdot X \cdot l \cdot o \cdot p} = 0$$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 0.16667$

$\frac{N_4 \cdot N_5 \cdot (N_1 - N_2)}{N_2 \cdot N_3} - R = 0.00000$

1CST6R1



$N_1 = 1.53745$
$N_2 = 1.32436$
$N_3 = 0.90291$
$N_4 = 2.48902$
$N_5 = 1.10418$
$N_6 = 1.84030$
$N_7 = 2.00118$
$R = 2.25213$

Unit. $AB := 1$ Given. $N_1 := 1.53745$ $N_2 := 1.32436$ $N_3 := .90291$ $N_4 := 2.48902$

$N_5 := 1.10418$ $N_6 := 1.84030$ $N_7 := 2.00118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$GH := \frac{N_2}{N_1 + N_2}$ $BD := N_3 \cdot GH$

$BJ := \frac{BD}{AB - GH}$ $EF := \frac{BJ}{BJ + N_4}$

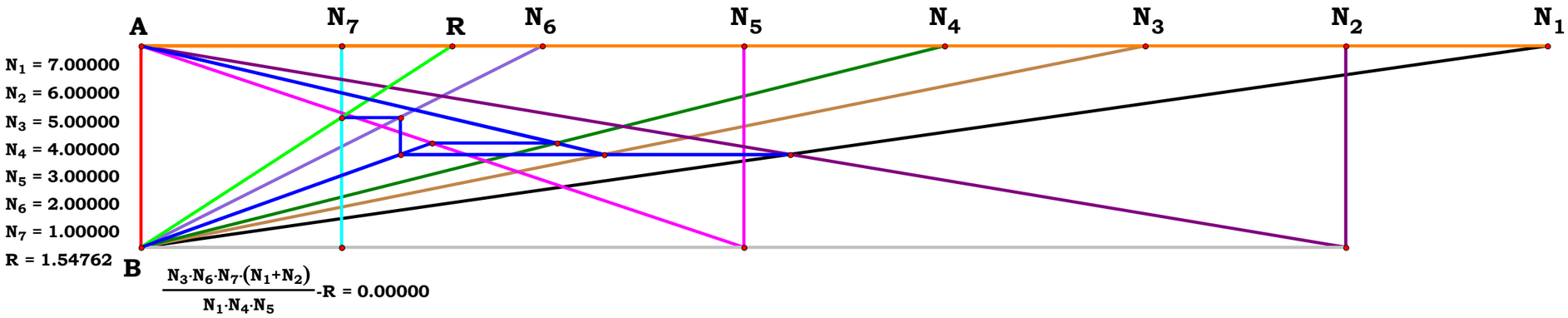
$BM := N_5 \cdot (AB - EF)$

$BQ := \frac{BM \cdot GH}{EF}$

$OQ := \frac{BQ}{N_6}$

$R := \frac{N_7}{OQ}$

$R = 2.252116$



$N_1 = 7.00000$
$N_2 = 6.00000$
$N_3 = 5.00000$
$N_4 = 4.00000$
$N_5 = 3.00000$
$N_6 = 2.00000$
$N_7 = 1.00000$
$R = 1.54762$

$\frac{N_3 \cdot N_6 \cdot N_7 \cdot (N_1 + N_2)}{N_1 \cdot N_4 \cdot N_5} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_6 \cdot N_7 \cdot (N_1 + N_2)}{N_1 \cdot N_4 \cdot N_5} = 0$

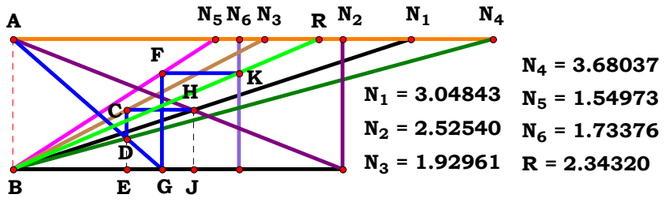
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$R - \frac{D \cdot E \cdot N_u \cdot (A + B)}{B \cdot C \cdot F \cdot G} = 0$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$R - \frac{V \cdot Y \cdot Z \cdot m \cdot n \cdot (T \cdot k + U \cdot j)}{T \cdot W \cdot X \cdot k \cdot l \cdot o \cdot p} = 0$

1CST6R2



$N_4 = 3.68037$
$N_1 = 3.04843$ $N_5 = 1.54973$
$N_2 = 2.52540$ $N_6 = 1.73376$
$N_3 = 1.92961$ $R = 2.34320$

Unit. $AB := 1$ **Given.** $N_1 := 3.04843$ $N_2 := 2.52540$ $N_3 := 1.92961$

$N_4 := 3.68037$ $N_5 := 1.54973$ $N_6 := 1.73376$

$N_u := -3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$HJ := \frac{N_2}{N_1 + N_2}$ $BE := N_3 \cdot HJ$

$DE := \frac{BE}{N_4}$ $BG := \frac{BE}{AB - DE}$

$FG := \frac{BG}{N_5}$ $R := \frac{N_6}{FG}$

$R = 2.343206$

Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4\right)}{N_2 \cdot N_3 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

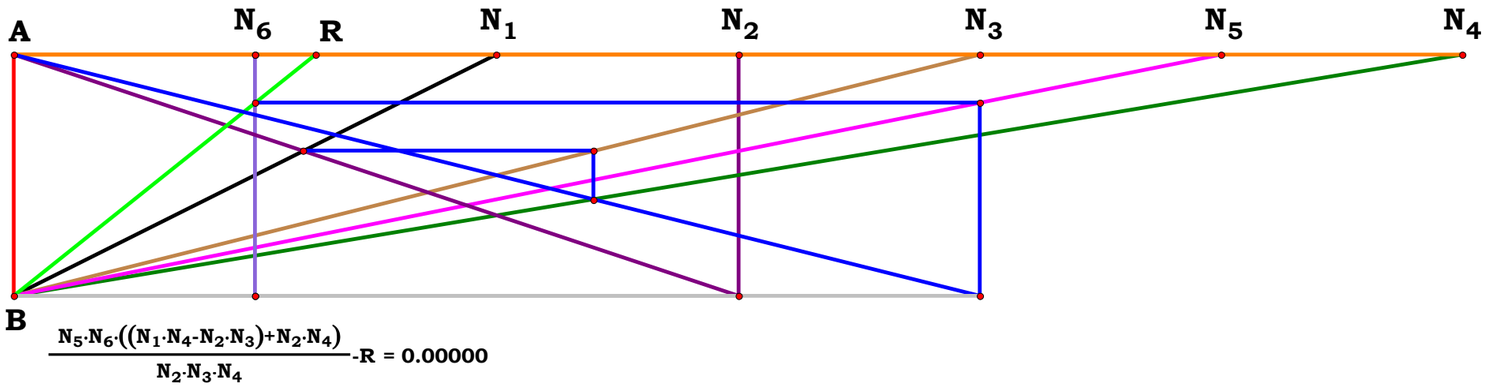
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot E \cdot F} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

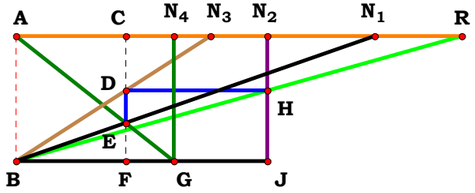
$$R - \frac{Y \cdot Z \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{V \cdot W \cdot X \cdot k \cdot o \cdot p} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 6.00000$
$N_5 = 5.00000$
$N_6 = 1.00000$
$R = 1.25000$

$\frac{N_5 \cdot N_6 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}{N_2 \cdot N_3 \cdot N_4} - R = 0.00000$

1CST6R3



$N_1 = 2.86869$
$N_2 = 2.01010$
$N_3 = 1.55556$
$N_4 = 1.26263$
$R = 3.56643$

Unit. $AB := 1$ Given. $N_1 := 2.86869$ $N_2 := 2.01010$ $N_3 := 1.55556$ $N_4 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BF := \frac{N_1 \cdot N_4}{N_1 + N_4}$ $CD := \frac{N_3 - BF}{N_3}$

$R := \frac{N_2}{1 - CD}$ $R = 3.566429$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_3 + N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

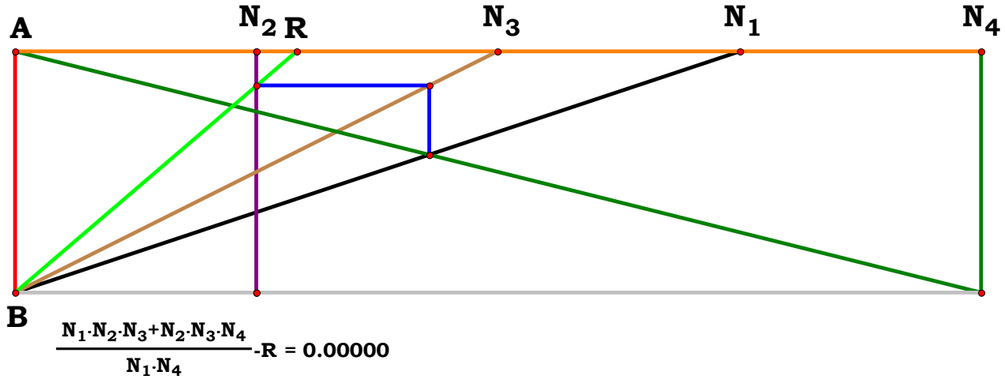
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (A + D)}{B \cdot C} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

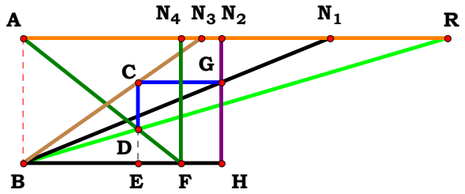
$R - \frac{X \cdot Y \cdot (W \cdot p + Z \cdot m)}{W \cdot Z \cdot n \cdot o} = 0$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 1.16667$

$\frac{N_1 \cdot N_2 \cdot N_3 + N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4} - R = 0.00000$

1CST6R4



$N_1 = 2.45455$
$N_2 = 1.58586$
$N_3 = 1.42424$
$N_4 = 1.26263$
$R = 3.39291$

Unit. $AB := 1$ Given. $N_1 := 2.45455$ $N_2 := 1.58586$ $N_3 := 1.42424$ $N_4 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$GH := \frac{N_2}{N_1}$ $BE := N_3 \cdot GH$

$DE := \frac{N_4 - BE}{N_4}$ $R := \frac{BE}{DE}$

$R = 3.392845$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

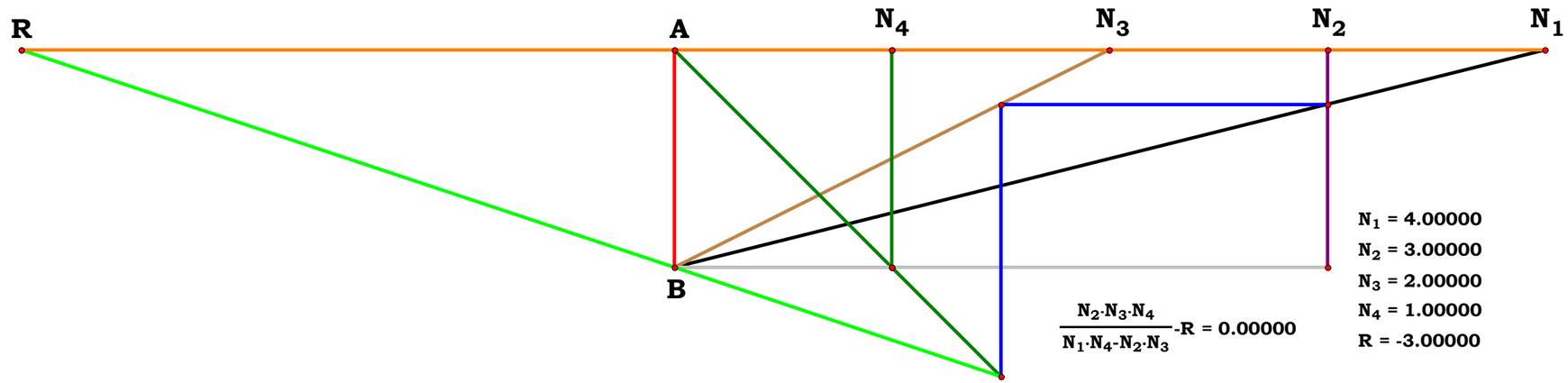
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot N_u}{B \cdot C - A \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

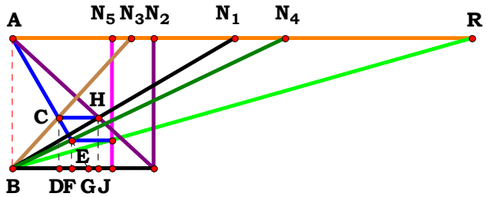
$$R - \frac{X \cdot Y \cdot Z \cdot m}{W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 1.00000$
$R = -3.00000$

$\frac{N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_2 \cdot N_3} - R = 0.00000$

1CST6R5



$N_1 = 1.70210$
$N_2 = 1.08221$
$N_3 = 0.91260$
$N_4 = 2.09190$
$N_5 = 0.76518$
$R = 3.52382$

Unit. $AB := 1$ Given. $N_1 := 1.70210$ $N_2 := 1.08221$ $N_3 := .91260$

$N_4 := 2.09190$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

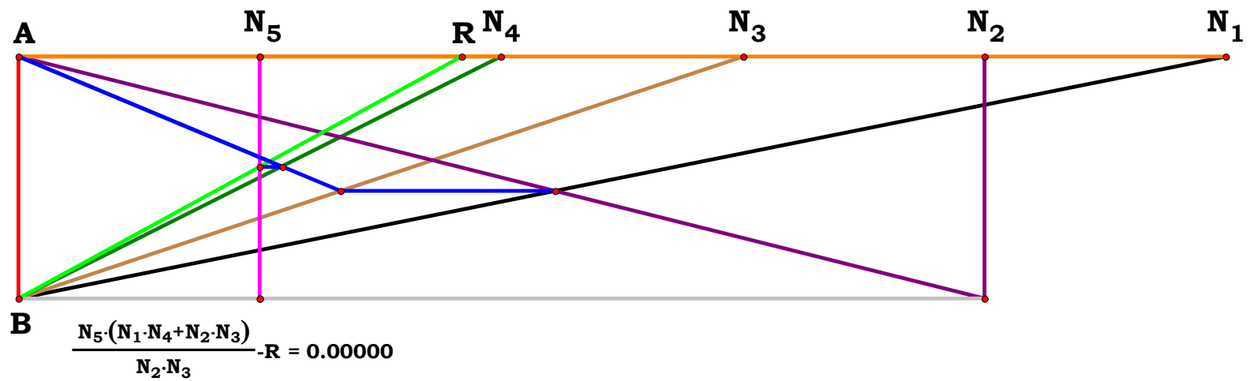
$HJ := \frac{N_2}{N_1 + N_2}$ $BD := N_3 \cdot HJ$

$BG := \frac{BD}{AB - HJ}$ $EF := \frac{BG}{BG + N_4}$

$R := \frac{N_5}{EF}$ $R = 3.523836$

Definitions.

$R - \frac{N_5 \cdot (N_1 \cdot N_4 + N_2 \cdot N_3)}{N_2 \cdot N_3} = 0$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 1.83333$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

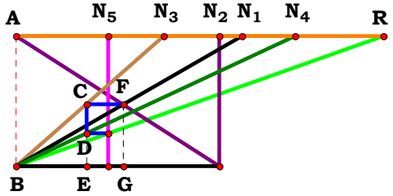
$R - \frac{N_u \cdot (A \cdot D + B \cdot C)}{A \cdot D \cdot E} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n + W \cdot X \cdot l \cdot o)}{W \cdot X \cdot l \cdot o \cdot p} = 0$

1CST6R6



$N_1 = 1.73116$
$N_2 = 1.55682$
$N_3 = 1.13537$
$N_4 = 2.14033$
$N_5 = 0.70706$
$R = 2.81508$

Unit. $AB := 1$ Given. $N_1 := 1.73116$ $N_2 := 1.55682$ $N_3 := 1.13537$

$N_4 := 2.14033$ $N_5 := .70706$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$FG := \frac{N_2}{N_1 + N_2}$ $BE := N_3 \cdot FG$

$DE := \frac{BE}{N_4}$ $R := \frac{N_5}{DE}$

$R = 2.815078$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2)}{N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

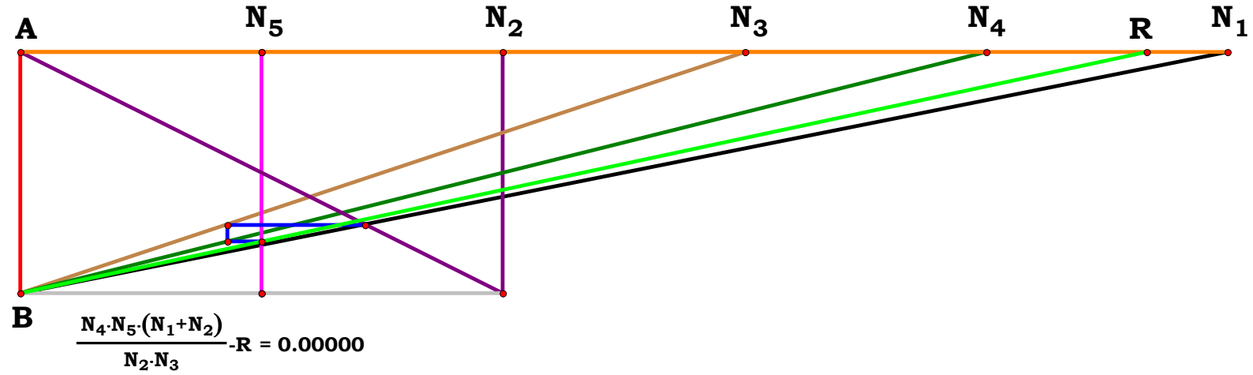
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{C \cdot N_u \cdot (A + B)}{A \cdot D \cdot E} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

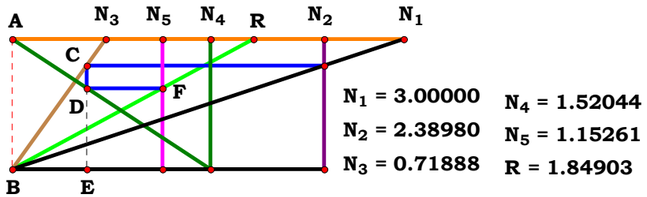
$$R - \frac{Y \cdot Z \cdot n \cdot (V \cdot m + W \cdot l)}{W \cdot X \cdot l \cdot o \cdot p} = 0$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 1.00000$
$R = 4.66667$

$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2)}{N_2 \cdot N_3} - R = 0.00000$

1CST6R7



$N_1 = 3.00000$ $N_4 = 1.52044$
$N_2 = 2.38980$ $N_5 = 1.15261$
$N_3 = 0.71888$ $R = 1.84903$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.3898$ $N_3 := .71888$

$N_4 := 1.52044$ $N_5 := 1.15261$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$CE := \frac{N_2}{N_1}$ $BE := CE \cdot N_3$

$DE := AB - \frac{BE}{N_4}$ $R := \frac{N_5}{DE}$

$R = 1.84903$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5}{N_1 \cdot N_4 - N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

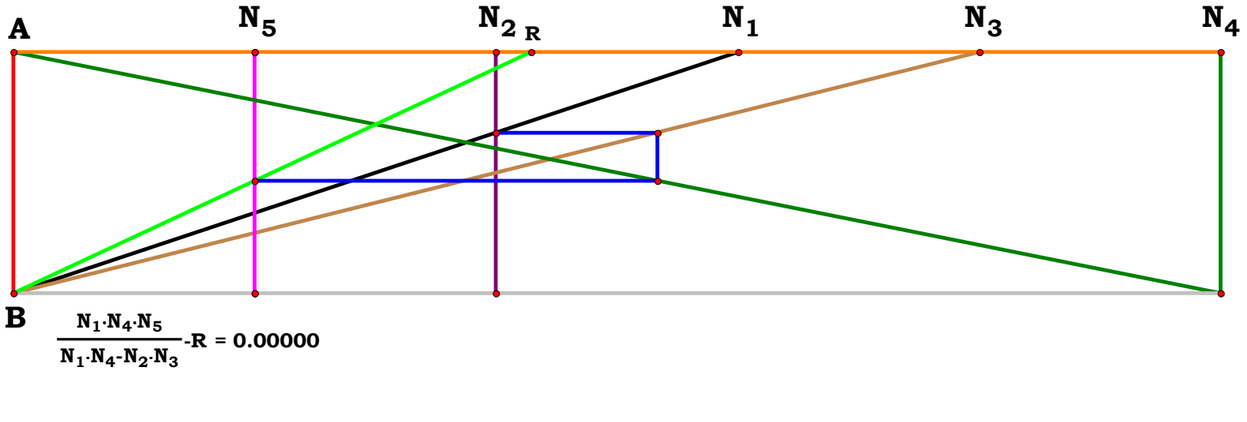
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot C \cdot N_u}{E \cdot (B \cdot C - A \cdot D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$

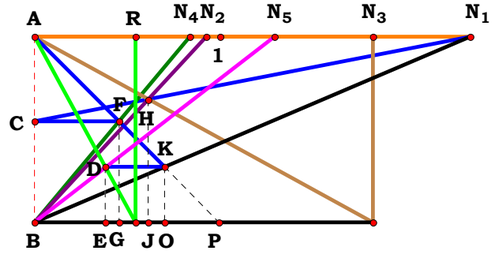
$N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot n}{p \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o)} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
$R = 2.14286$

1CST7R0



$N_1 = 2.34137$
$N_2 = 0.92535$
$N_3 = 1.82306$
$N_4 = 0.83275$
$N_5 = 1.28821$
$R = 0.54592$

Unit. $AB := 1$ **Given.** $N_1 := 2.34137$ $N_2 := .92535$ $N_3 := 1.82306$

$N_4 := .83275$ $N_5 := 1.28821$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$HJ := \frac{N_3}{N_2 + N_3}$ $BJ := \frac{N_2 \cdot N_3}{N_2 + N_3}$

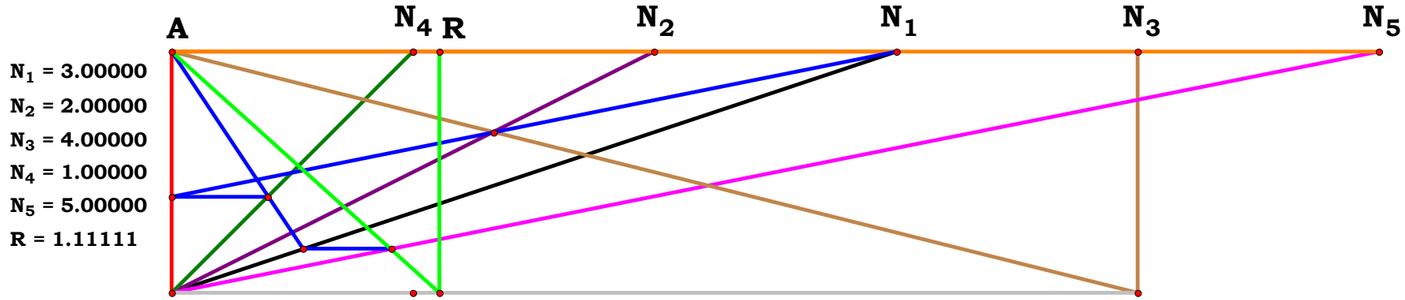
$AC := \frac{(AB - HJ) \cdot N_1}{N_1 - BJ}$

$BG := N_4 \cdot (AB - AC)$

$BP := \frac{BG}{AC}$ $KO := \frac{BP}{BP + N_1}$

$BE := N_5 \cdot KO$ $R := \frac{BE}{AB - KO}$

$R = 0.545916$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$N_5 = 5.00000$
$R = 1.11111$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2)}{N_1^2 \cdot N_2} = 0$

B $\frac{N_3 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2)}{N_1^2 \cdot N_2} - R = 0.00000$

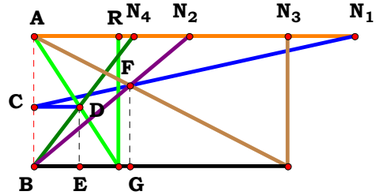
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{A \cdot N_u \cdot (B - A)}{C \cdot D \cdot E} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Y \cdot Z \cdot l \cdot (V \cdot m - W \cdot l)}{V^2 \cdot W \cdot n \cdot o \cdot p} = 0$

1CST7R1



$N_1 = 2.45760$
$N_2 = 1.18876$
$N_3 = 1.94898$
$N_4 = 0.76495$
$R = 0.64750$

Unit. $AB := 1$ Given. $N_1 := 2.45760$ $N_2 := 1.18876$ $N_3 := 1.94898$ $N_4 := .76495$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

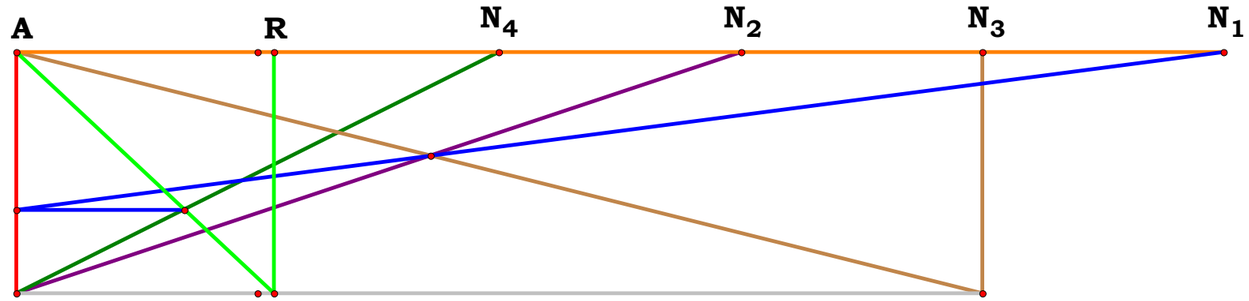
$FG := \frac{N_3}{N_2 + N_3}$ $BG := \frac{N_2 \cdot N_3}{N_2 + N_3}$

$AC := \frac{N_1 \cdot (AB - FG)}{N_1 - BG}$ $DE := AB - AC$

$BE := N_4 \cdot DE$ $R := \frac{BE}{AC}$

$R = 0.647503$

$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 1.06667$



$\frac{N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_2} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

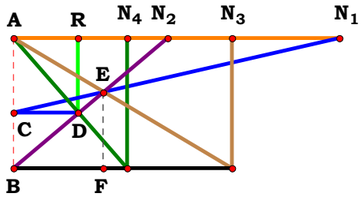
$R - \frac{N_u \cdot (B - A)}{C \cdot D} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot (W \cdot n - X \cdot m)}{W \cdot X \cdot o \cdot p} = 0$

1CST7R2



$N_1 = 2.49634$
$N_2 = 1.17907$
$N_3 = 1.67778$
$N_4 = 0.87149$
$R = 0.49775$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 1.17907$ $N_3 := 1.67778$ $N_4 := .87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

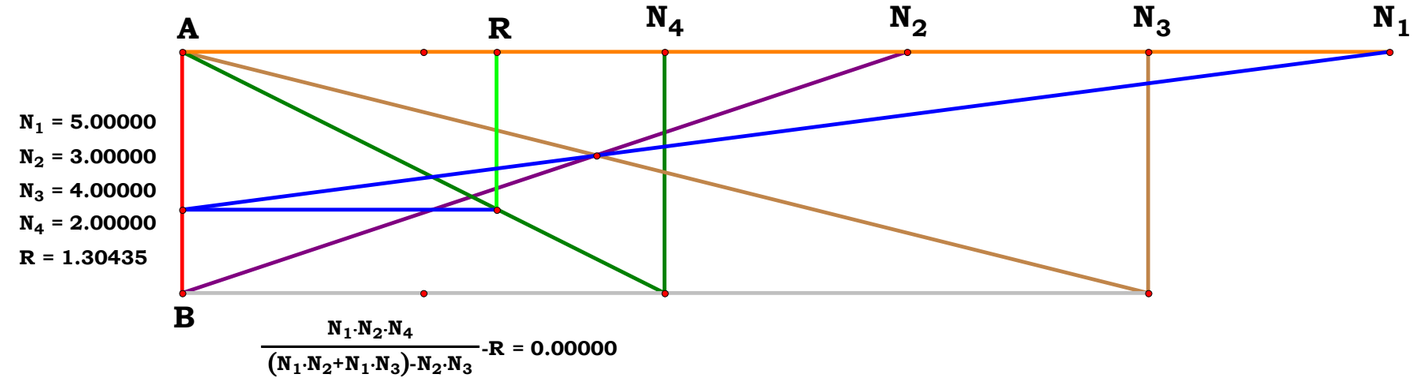
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$EF := \frac{N_3}{N_2 + N_3}$ $BF := N_2 \cdot EF$

$AC := \frac{N_1 \cdot (AB - EF)}{N_1 - BF}$ $R := N_4 \cdot AC$

$R = 0.497746$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 1.30435$

$\frac{N_1 \cdot N_2 \cdot N_4}{(N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_4}{N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

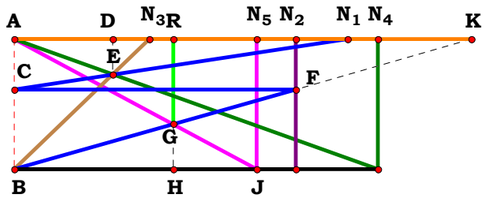
$R - \frac{C \cdot N_u}{D \cdot (B - A + C)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot X \cdot Z \cdot o}{p \cdot (W \cdot X \cdot o + W \cdot Y \cdot n - X \cdot Y \cdot m)} = 0$

1CST7R3



$N_1 = 2.55445$
$N_2 = 2.15734$
$N_3 = 1.03851$
$N_4 = 2.78928$
$N_5 = 1.85967$
$R = 1.21571$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := 2.15734$ $N_3 := 1.03851$

$N_4 := 2.78928$ $N_5 := 1.85967$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_3 \cdot N_4}{N_3 + N_4} \qquad DE := \frac{AD}{N_4}$$

$$AC := \frac{DE \cdot N_1}{N_1 - AD} \qquad AK := \frac{N_2}{AB - AC}$$

$$R := \frac{AK \cdot N_5}{AK + N_5} \qquad R = 1.215712$$

Definitions.

$$R - \frac{N_2 \cdot N_5 \cdot \left(N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4\right)}{N_1 \cdot N_2 \cdot \left(N_3 + N_4\right) - N_2 \cdot N_3 \cdot N_4 + N_4 \cdot N_5 \cdot \left(N_1 - N_3\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

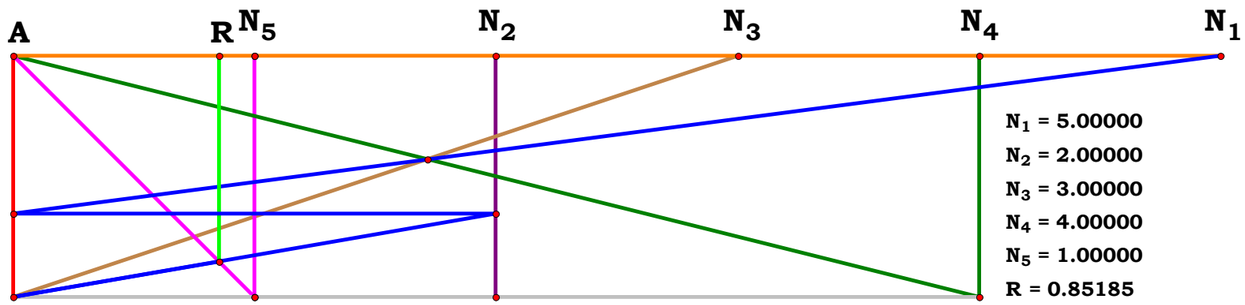
$$N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C - A + D)}{B \cdot C - A \cdot B - A \cdot E + C \cdot E + D \cdot E} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0$$

$$N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

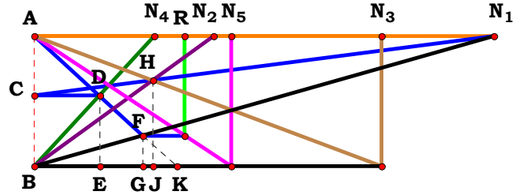
$$R - \frac{W \cdot Z \cdot (V \cdot X \cdot o + V \cdot Y \cdot n - X \cdot Y \cdot l)}{V \cdot W \cdot X \cdot o \cdot p + V \cdot W \cdot Y \cdot n \cdot p + V \cdot Y \cdot Z \cdot m \cdot n - W \cdot X \cdot Y \cdot l \cdot p - X \cdot Y \cdot Z \cdot l \cdot m} = 0$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 1.00000$
$R = 0.85185$

$$\frac{N_2 \cdot N_5 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)}{(N_1 \cdot N_2 \cdot (N_3 + N_4) - N_2 \cdot N_3 \cdot N_4) + N_4 \cdot N_5 \cdot (N_1 - N_3)} - R = 0.00000$$

1CST7R4



$N_1 = 3.52303$
$N_2 = 1.37279$
$N_3 = 2.66573$
$N_4 = 0.91992$
$N_5 = 1.51098$
$R = 1.15389$

Unit. $AB := 1$ Given. $N_1 := 3.52303$ $N_2 := 1.37279$ $N_3 := 2.66573$

$N_4 := .91992$ $N_5 := 1.51098$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

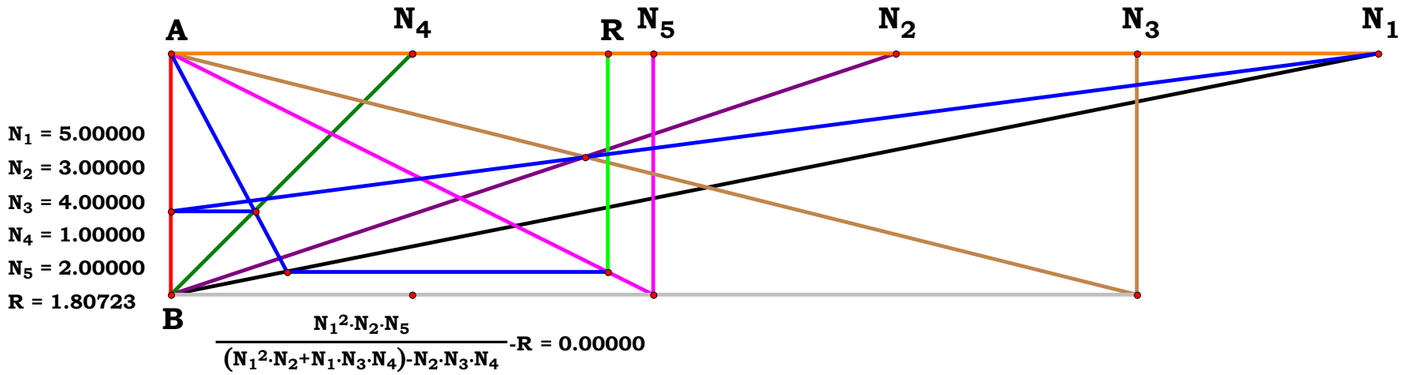
Descriptions.

$$HJ := \frac{N_3}{N_2 + N_3} \qquad BJ := \frac{N_2 \cdot N_3}{N_2 + N_3}$$

$$AC := \frac{N_1 \cdot (AB - HJ)}{N_1 - BJ} \qquad BE := N_4 \cdot (AB - AC)$$

$$BK := \frac{BE}{AC} \qquad FG := \frac{BK}{BK + N_1}$$

$$R := N_5 \cdot (AB - FG) \qquad R = 1.153888$$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$N_5 = 2.00000$
$R = 1.80723$

$$\frac{N_1^2 \cdot N_2 \cdot N_5}{(N_1^2 \cdot N_2 + N_1 \cdot N_3 \cdot N_4) - N_2 \cdot N_3 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{N_1^2 \cdot N_2 \cdot N_5}{N_1^2 \cdot N_2 + N_1 \cdot N_3 \cdot N_4 - N_2 \cdot N_3 \cdot N_4} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

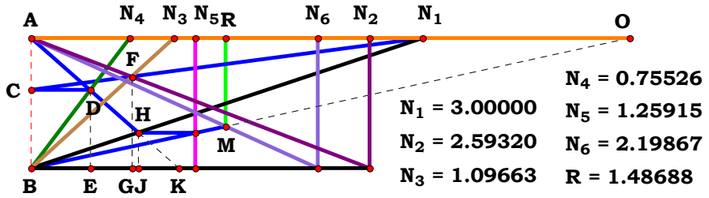
$$R - \frac{C \cdot D \cdot N_u}{E \cdot \left(B \cdot A - A^2 + C \cdot D\right)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0$$

$$N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V^2 \cdot W \cdot Z \cdot n \cdot o}{p \cdot \left(W \cdot n \cdot o \cdot V^2 + X \cdot Y \cdot m \cdot V \cdot l - W \cdot X \cdot Y \cdot l^2\right)} = 0$$

1CST7R5



$N_4 = 0.75526$
$N_1 = 3.00000$ $N_5 = 1.25915$
$N_2 = 2.59320$ $N_6 = 2.19867$
$N_3 = 1.09663$ $R = 1.48688$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.5932$ $N_3 := 1.09663$

$N_4 := .75526$ $N_5 := 1.25915$ $N_6 := 2.19867$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

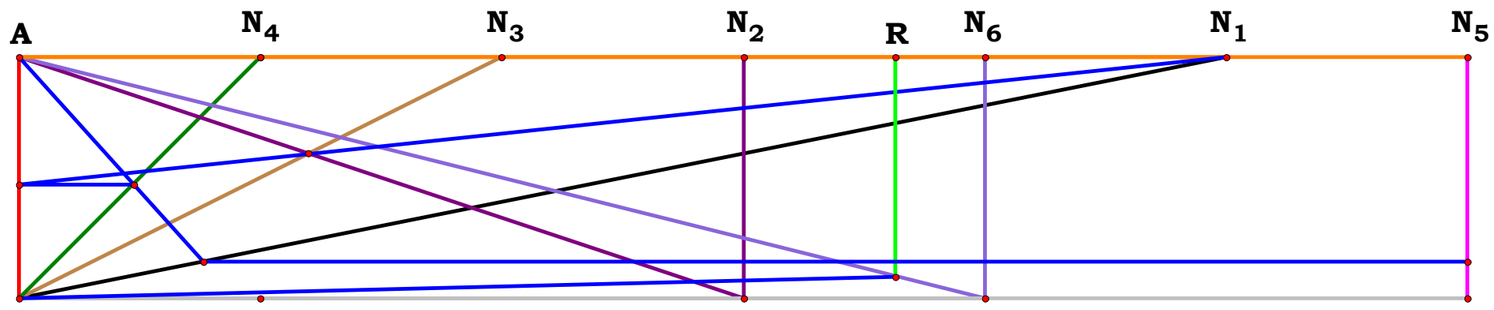
Descriptions.

$FG := \frac{N_2}{N_2 + N_3}$ $BG := \frac{N_2 \cdot N_3}{N_2 + N_3}$

$AC := \frac{N_1 \cdot (AB - FG)}{N_1 - BG}$ $BE := N_4 \cdot (AB - AC)$

$BK := \frac{BE}{AC}$ $HJ := \frac{BK}{BK + N_1}$

$AO := \frac{N_5}{HJ}$ $R := \frac{N_6 \cdot AO}{N_6 + AO}$ $R = 1.486876$



Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot \left[N_1^{\,2} \cdot N_3 + N_2 \cdot N_4 \cdot (N_1 - N_3) \right]}{N_1 \cdot N_5 \cdot (N_1 \cdot N_3 + N_2 \cdot N_4) + N_2 \cdot N_4 \cdot (N_1 \cdot N_6 - N_3 \cdot N_5 - N_3 \cdot N_6)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{N_u \cdot (C \cdot A - A^2 + B \cdot D)}{A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

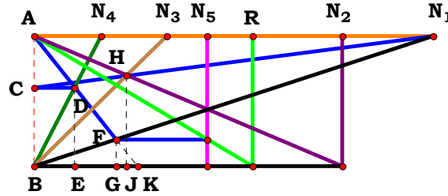
$$R - \frac{Y \cdot Z \cdot (W \cdot l \cdot n \cdot U^2 + V \cdot X \cdot m \cdot U \cdot k - V \cdot W \cdot X \cdot k^2)}{W \cdot (U^2 \cdot Y \cdot l \cdot n \cdot p - V \cdot X \cdot Z \cdot k^2 \cdot o - V \cdot X \cdot Y \cdot k^2 \cdot p) + U \cdot V \cdot X \cdot k \cdot m \cdot (Y \cdot p + Z \cdot o)} = 0$$

B

$$\frac{N_5 \cdot N_6 \cdot (N_1^{\,2} \cdot N_3 + N_2 \cdot N_4 \cdot (N_1 - N_3))}{N_1 \cdot N_5 \cdot (N_1 \cdot N_3 + N_2 \cdot N_4) + N_2 \cdot N_4 \cdot (N_1 \cdot N_6 - N_3 \cdot N_5 - N_3 \cdot N_6)} - R = 0.00000$$

$N_1 = 5.00000$ $N_4 = 1.00000$
$N_2 = 3.00000$ $N_5 = 6.00000$
$N_3 = 2.00000$ $N_6 = 4.00000$
$R = 3.63077$

1CST7R6



$N_1 = 3.05811$
$N_2 = 2.36074$
$N_3 = 1.01914$
$N_4 = 0.51312$
$N_5 = 1.32695$
$R = 1.67082$

Unit. $AB := 1$ Given. $N_1 := 3.05811$ $N_2 := 2.36074$ $N_3 := 1.01914$

$N_4 := .51312$ $N_5 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

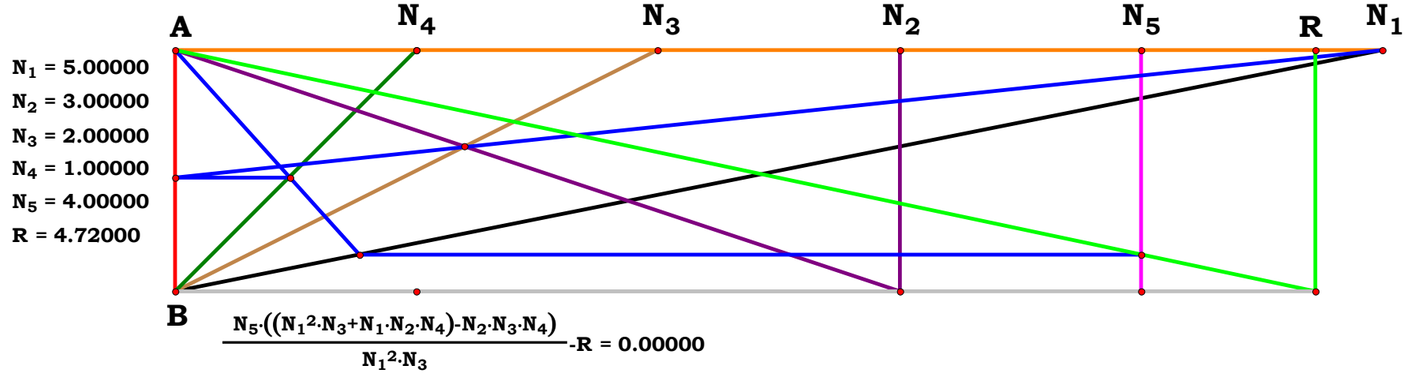
Descriptions.

$HJ := \frac{N_2}{N_2 + N_3}$ $BJ := HJ \cdot N_3$

$AC := \frac{N_1 \cdot (AB - HJ)}{N_1 - BJ}$ $BE := N_4 \cdot (AB - AC)$

$BK := \frac{BE}{AC}$ $FG := \frac{BK}{N_1 + BK}$

$R := \frac{N_5}{(AB - FG)}$ $R = 1.670819$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 1.00000$
$N_5 = 4.00000$
$R = 4.72000$

$\frac{N_5 \cdot ((N_1^2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4) - N_2 \cdot N_3 \cdot N_4)}{N_1^2 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_5 \cdot \left(N_1^2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4 - N_2 \cdot N_3 \cdot N_4\right)}{N_1^2 \cdot N_3} = 0$

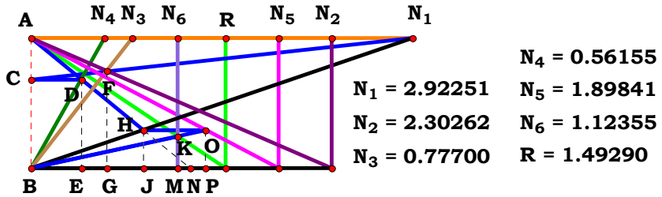
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{N_u \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{B \cdot D \cdot E} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{Z \cdot \left(X \cdot m \cdot o \cdot V^2 + W \cdot Y \cdot n \cdot V \cdot l - W \cdot X \cdot Y \cdot l^2\right)}{V^2 \cdot X \cdot m \cdot o \cdot p} = 0$

1CST7R7



$N_4 = 0.56155$ $N_5 = 1.89841$ $N_6 = 1.12355$ $R = 1.49290$

$N_1 = 2.92251$ $N_2 = 2.30262$ $N_3 = 0.77700$

Unit. $AB := 1$ **Given.** $N_1 := 2.92251$ $N_2 := 2.30262$ $N_3 := .77700$

$N_4 := .56155$ $N_5 := 1.89841$ $N_6 := 1.12355$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

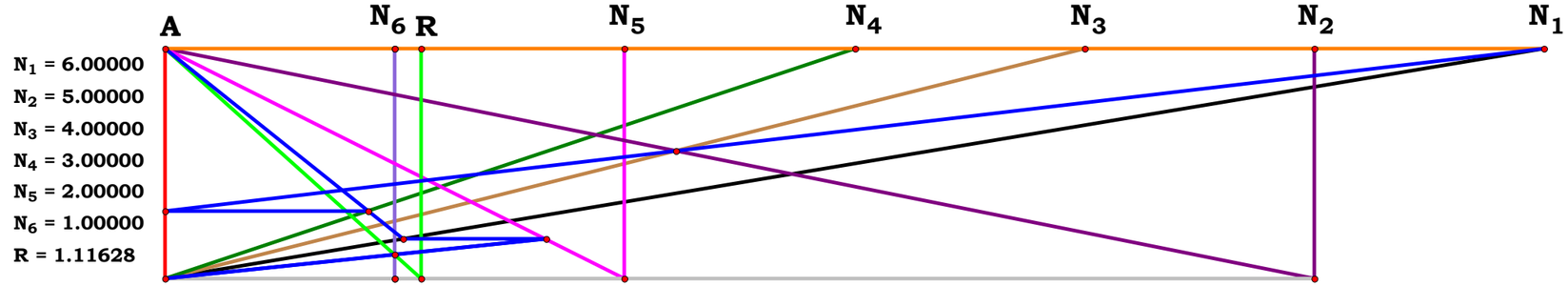
$FG := \frac{N_2}{N_2 + N_3}$ $BG := FG \cdot N_3$

$AC := \frac{N_1 \cdot (AB - FG)}{N_1 - BG}$ $BE := N_4 \cdot (AB - AC)$

$BN := \frac{BE}{AC}$ $HJ := \frac{BN}{BN + N_1}$

$BP := N_5 \cdot (AB - HJ)$ $KM := \frac{N_6 \cdot HJ}{BP}$

$R := \frac{N_6}{AB - KM}$ $R = 1.492904$



Definitions.

B $\frac{N_1^2 \cdot N_3 \cdot N_5 \cdot N_6}{(N_1^2 \cdot N_3 \cdot N_5 - N_1 \cdot N_2 \cdot N_4 \cdot N_6) + N_2 \cdot N_3 \cdot N_4 \cdot N_6} - R = 0.00000$

$R - \frac{N_1^2 \cdot N_3 \cdot N_5 \cdot N_6}{N_1^2 \cdot N_3 \cdot N_5 - N_1 \cdot N_2 \cdot N_4 \cdot N_6 + N_2 \cdot N_3 \cdot N_4 \cdot N_6} = 0$

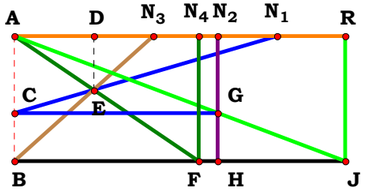
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$R - \frac{B \cdot D \cdot N_u}{E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{U^2 \cdot W \cdot Y \cdot Z \cdot l \cdot n}{W \cdot Y \cdot l \cdot n \cdot p \cdot U^2 - V \cdot X \cdot Z \cdot m \cdot o \cdot U \cdot k + V \cdot W \cdot X \cdot Z \cdot o \cdot k^2} = 0$

1CST7R8



$N_1 = 2.10101$
$N_2 = 1.62626$
$N_3 = 1.11111$
$N_4 = 1.47475$
$R = 2.64325$

Unit. $AB := 1$ **Given.** $N_1 := 2.10101$ $N_2 := 1.62626$ $N_3 := 1.11111$ $N_4 := 1.47475$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$DE := \frac{N_3}{N_3 + N_4}$ $AD := N_4 \cdot DE$

$AC := \frac{DE \cdot N_1}{N_1 - AD}$ $R := \frac{N_2}{AC}$

$R = 2.643245$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4 - N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

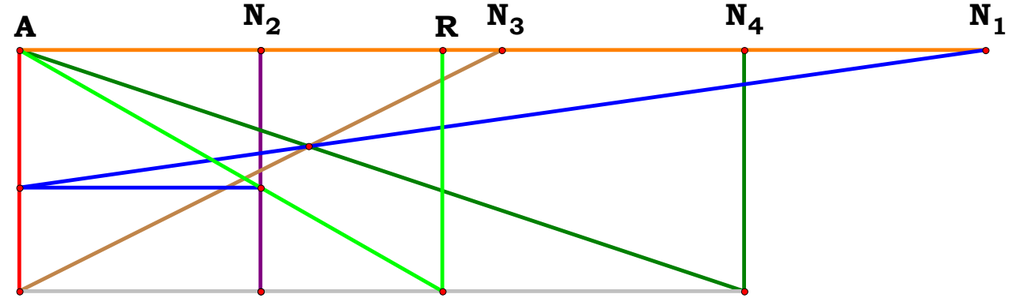
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (C - A + D)}{B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

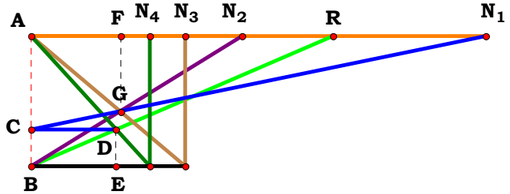
$$R - \frac{X \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{W \cdot Y \cdot n \cdot p} = 0$$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 1.75000$

$B \quad \frac{(N_1 \cdot N_2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4) - N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_3} - R = 0.00000$

1CST7R9



$N_1 = 3.48429$
$N_2 = 1.61493$
$N_3 = 1.18380$
$N_4 = 0.91023$
$R = 2.31447$

Unit. $AB := 1$ Given. $N_1 := 3.48429$ $N_2 := 1.61493$ $N_3 := 1.18380$ $N_4 := .91023$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AF := \frac{N_2 \cdot N_3}{N_2 + N_3}$ $FG := \frac{AF}{N_3}$

$AC := \frac{FG \cdot N_1}{N_1 - AF}$ $DE := AB - AC$

$BE := N_4 \cdot AC$ $R := \frac{BE}{DE}$ $R = 2.31445$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_4}{N_1 \cdot N_3 - N_2 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

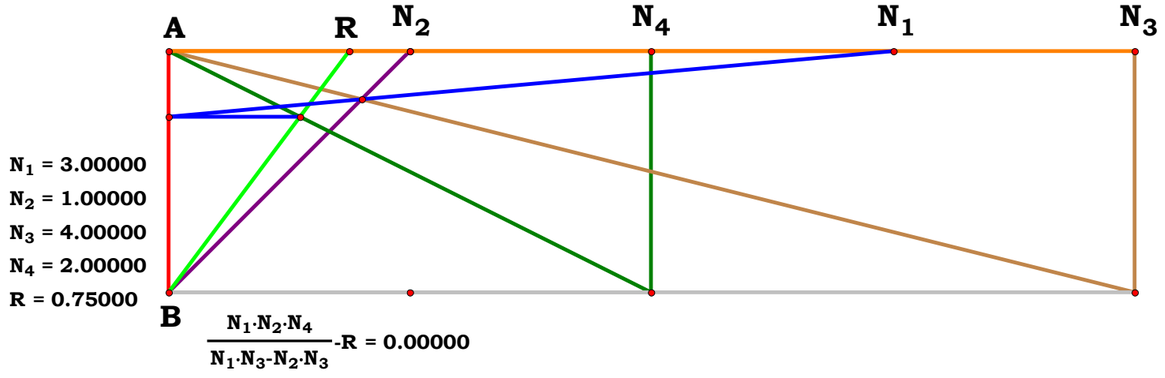
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{C \cdot N_u}{D \cdot (B - A)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

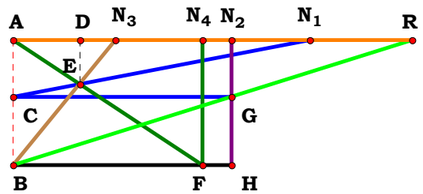
$R - \frac{W \cdot X \cdot Z \cdot o}{Y \cdot p \cdot (W \cdot n - X \cdot m)} = 0$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 0.75000$

$\frac{N_1 \cdot N_2 \cdot N_4}{N_1 \cdot N_3 - N_2 \cdot N_3} - R = 0.00000$

1CST7R10



$N_1 = 2.37374$
$N_2 = 1.74747$
$N_3 = 0.81818$
$N_4 = 1.51515$
$R = 3.18744$

Unit. $AB := 1$ **Given.** $N_1 := 2.37374$ $N_2 := 1.74747$ $N_3 := .81818$ $N_4 := 1.51515$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$DE := \frac{N_3}{N_3 + N_4}$ $AD := N_4 \cdot DE$

$AC := \frac{DE \cdot N_1}{N_1 - AD}$ $R := \frac{N_2}{1 - AC}$

$R = 3.187426$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4 - N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_3 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

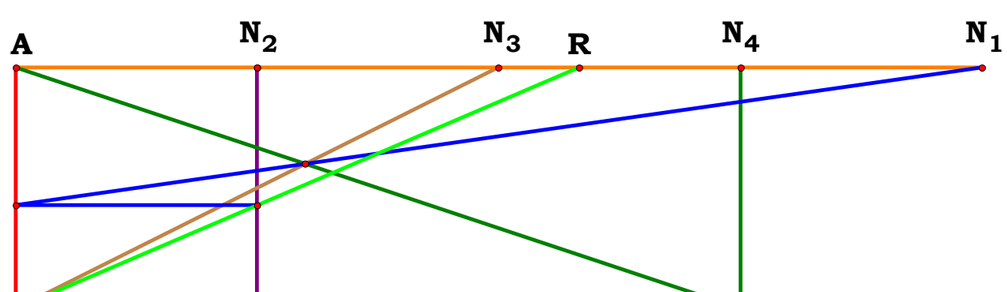
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (C - A + D)}{B \cdot (C - A)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

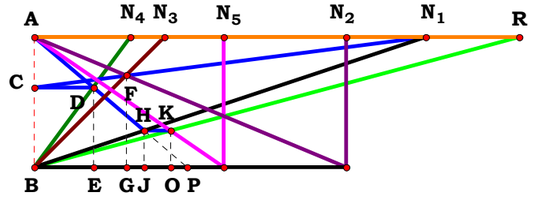
$$R - \frac{X \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{Z \cdot n \cdot (W \cdot o - Y \cdot m)} = 0$$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 2.33333$

B $\frac{(N_1 \cdot N_2 \cdot N_3 + N_1 \cdot N_2 \cdot N_4) - N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 - N_3 \cdot N_4} - R = 0.00000$

1CST7R11



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 0.99977$
$N_4 = 0.73589$
$N_5 = 1.45287$
$R = 3.71634$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := .99977$

$N_4 := .73589$ $N_5 := 1.45287$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$FG := \frac{N_2}{N_2 + N_3}$ $BG := N_3 \cdot FG$

$AC := \frac{N_1 \cdot (AB - FG)}{N_1 - BG}$ $BE := N_4 \cdot (AB - AC)$

$BP := \frac{BE}{AC}$ $HJ := \frac{BP}{BP + N_1}$

$BO := N_5 \cdot (AB - HJ)$ $R := \frac{BO}{HJ}$

$R = 3.716336$

Definitions.

$$R - \frac{N_1^{\,2} \cdot N_3 \cdot N_5}{N_2 \cdot N_4 \cdot (N_1 - N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

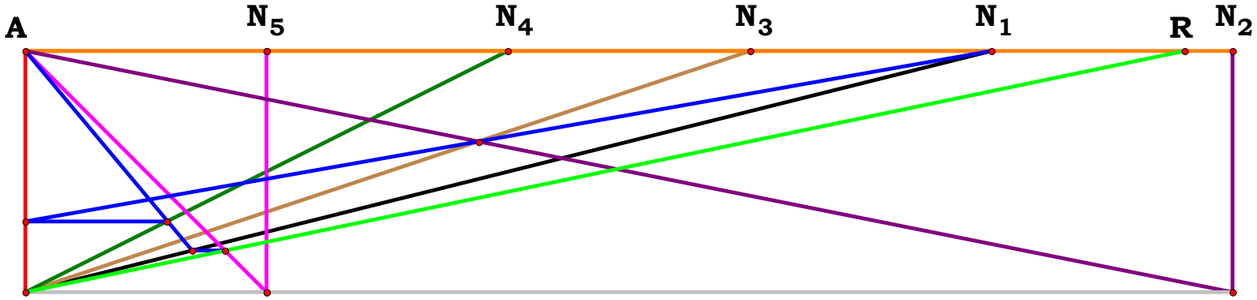
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot D \cdot N_u}{E \cdot [A \cdot (C - A)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

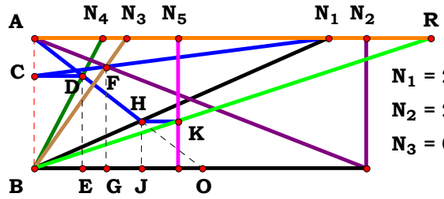
$$R - \frac{V^2 \cdot X \cdot Z \cdot m \cdot o}{W \cdot Y \cdot l \cdot p \cdot (V \cdot n - X \cdot l)} = 0$$



$N_1 = 4.00000$
$N_2 = 5.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 4.80000$

B $\frac{N_1^{\,2} \cdot N_3 \cdot N_5}{N_2 \cdot N_4 \cdot (N_1 - N_3)} - R = 0.00000$

1CST7R12



$N_1 = 2.25419$ $N_4 = 0.52280$
$N_2 = 2.54477$ $N_5 = 1.10418$
$N_3 = 0.70920$ $R = 3.04005$

Unit. $AB := 1$ **Given.** $N_1 := 2.25419$ $N_2 := 2.54477$ $N_3 := .70920$

$N_4 := .52280$ $N_5 := 1.10418$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

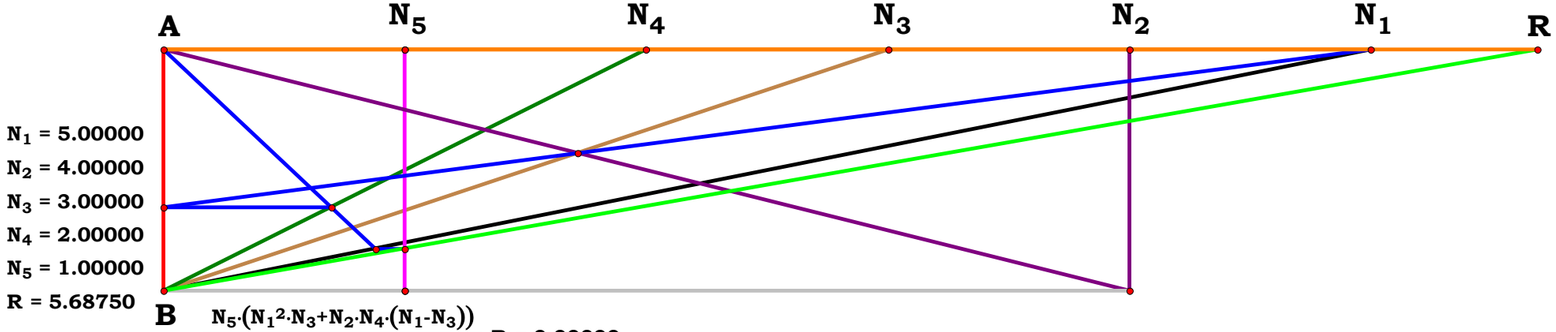
Descriptions.

$FG := \frac{N_2}{N_2 + N_3}$ $BG := FG \cdot N_3$

$AC := \frac{N_1 \cdot (AB - FG)}{N_1 - BG}$ $BE := N_4 \cdot (AB - AC)$

$BO := \frac{BE}{AC}$ $HJ := \frac{BO}{BO + N_1}$

$R := \frac{N_5}{HJ}$ $R = 3.040066$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 5.68750$

$\frac{N_5 \cdot (N_1^2 \cdot N_3 + N_2 \cdot N_4 \cdot (N_1 - N_3))}{N_2 \cdot N_4 \cdot (N_1 - N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_5 \cdot \left[N_1^{\,2} \cdot N_3 + N_2 \cdot N_4 \cdot (N_1 - N_3) \right]}{N_2 \cdot N_4 \cdot (N_1 - N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (A^2 - C \cdot A - B \cdot D)}{A \cdot E \cdot (A - C)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

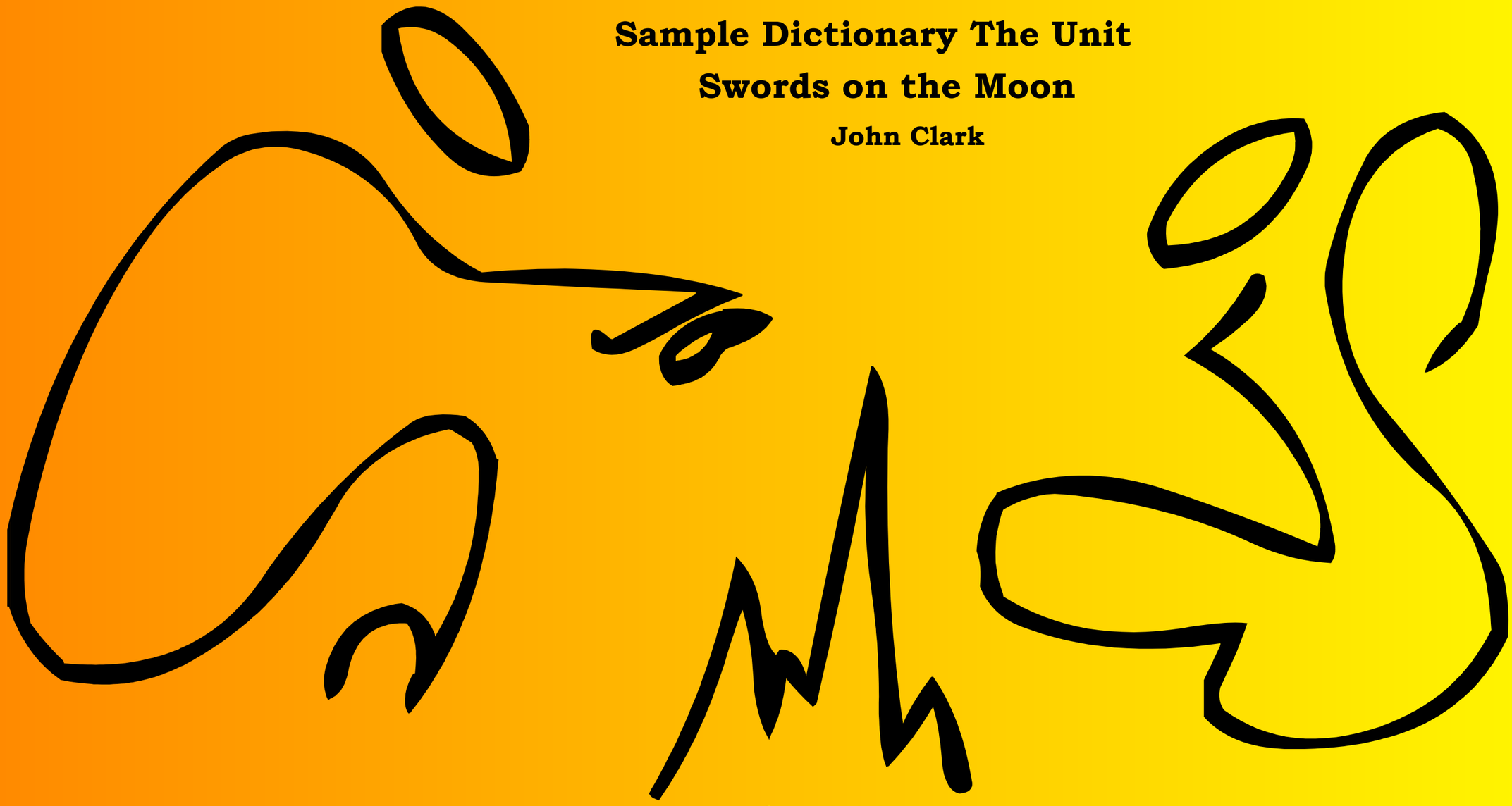
$$R - \frac{Z \cdot (X \cdot m \cdot o \cdot V^2 + W \cdot Y \cdot n \cdot V \cdot l - W \cdot X \cdot Y \cdot l^2)}{W \cdot Y \cdot l \cdot p \cdot (V \cdot n - X \cdot l)} = 0$$

Basic Analog Grammar

Sample Dictionary The Unit

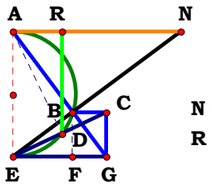
Swords on the Moon

John Clark



John 312

2SMT1R0



N = 1.34343

R = 0.38959

Unit. $AE := 1$ Given. $N := 1.34343$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$EN := \sqrt{AE^2 + N^2}$ $BE := \frac{AE^2}{EN}$

$BF := \frac{AE \cdot BE}{EN}$ $EG := \frac{EN \cdot BE}{N}$

$CG := BF$ $CE := \sqrt{EG^2 + CG^2}$

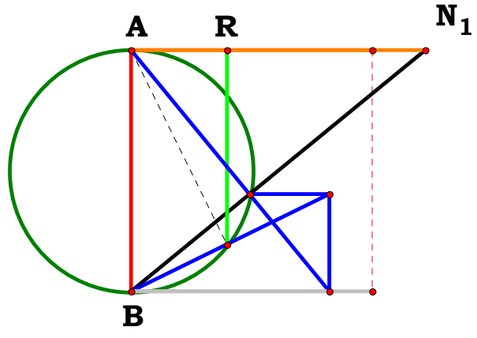
$DE := \frac{CG \cdot AE}{CE}$ $R := \frac{EG \cdot DE}{CE}$

$R = 0.389595$

$N_1 = 1.22089$

$R = 0.39523$

$\frac{N_1^3 + N_1}{N_1^4 + 3 \cdot N_1^2 + 1} - R = 0.00000$



Definitions.

$$R - \frac{N^3 + N}{N^4 + 3 \cdot N^2 + 1} = 0$$

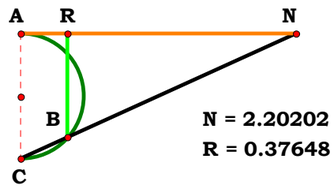
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A \cdot N_u \cdot \left(A^2 + N_u^2\right)}{A^4 + 3 \cdot A^2 \cdot N_u^2 + N_u^4} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot q \cdot \left(Z^2 + q^2\right)}{Z^4 + 3 \cdot Z^2 \cdot q^2 + q^4} = 0$$

2SMT1R1



N = 2.20202
R = 0.37648

Unit. $AC := 1$ **Given.** $N := 2.20202$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BC := \frac{1}{\left(N^2+1\right)^{\frac{1}{2}}} \qquad CN := \sqrt{N^2+AC^2}$$

$$R := \frac{N \cdot BC}{CN} \qquad R = 0.376485$$

Definitions.

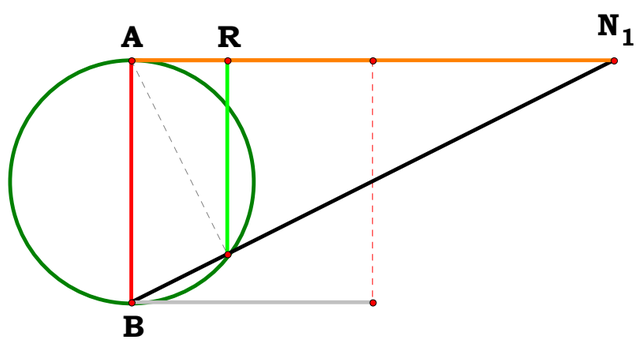
$$R - \frac{N}{N^2+1} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A \cdot N_u}{A^2+N_u{}^2} = 0$$

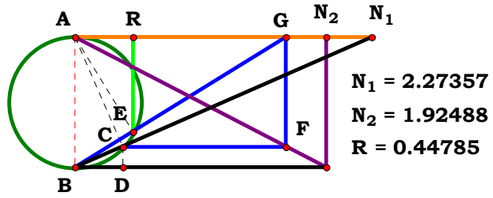
$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot q}{Z^2+q^2} = 0$$



$N_1 = 2.00000$
$R = 0.40000$
$\frac{N_1}{N_1{}^2+1} - R = 0.00000$

2SMT1R2



$N_1 = 2.27357$
$N_2 = 1.92488$
$R = 0.44785$

Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 1.92488$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BC := \frac{AB^2}{BN_1}$ $CD := \frac{AB \cdot BC}{BN_1}$

$AG := N_2 \cdot (AB - CD)$ $BG := \sqrt{AG^2 + AB^2}$

$BE := \frac{AB^2}{BG}$ $R := \frac{AG \cdot BE}{BG}$

$R = 0.447853$

Definitions.

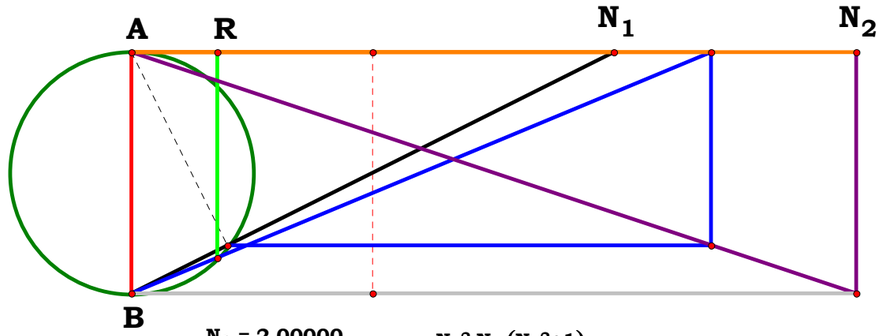
$$R - \frac{N_1^2 \cdot N_2 \cdot \left(N_1^2 + 1\right)}{N_1^4 \cdot N_2^2 + N_1^4 + 2 \cdot N_1^2 + 1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{B \cdot N_u^3 \cdot \left(A^2 + N_u^2\right)}{A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot N_u^2 + B^2 \cdot N_u^4 + N_u^6} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

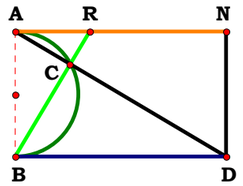
$$R - \frac{Y^2 \cdot Z \cdot q \cdot \left(Y^2 + p^2\right)}{Y^4 \cdot Z^2 + Y^4 \cdot q^2 + 2 \cdot Y^2 \cdot p^2 \cdot q^2 + p^4 \cdot q^2} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 0.35503$

$\frac{N_1^2 \cdot N_2 \cdot (N_1^2+1)}{N_1^4 \cdot N_2^2 + N_1^4 + 2 \cdot N_1^2 + 1} - R = 0.00000$

2SMT1R3



N = 1.68687
R = 0.59281

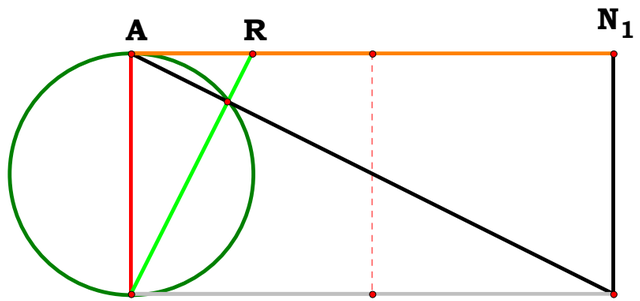
Unit. $AB := 1$ **Given.** $N := 1.68687$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$AC := \frac{1}{\left(N^2 + 1\right)^{\frac{1}{2}}}$ $AD := \sqrt{N^2 + AB^2}$

$R := \frac{AD \cdot AC}{N}$ $R = 0.592814$



Definitions.

$R - \frac{1}{N} = 0$

$N - \frac{N_u}{A} = 0$

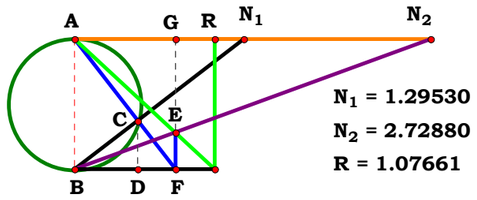
$R - \frac{A}{N_u} = 0$

$N - \frac{Z}{q} = 0$

B

$N_1 = 2.00000$ $R = 0.50000$ $\frac{1}{N_1} - R = 0.00000$

2SMT1R4



$N_1 = 1.29530$
$N_2 = 2.72880$
R = 1.07661

Unit. $AB := 1$ Given. $N_1 := 1.29530$ $N_2 := 2.72880$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BF := \frac{1}{N_1}$ $EF := \frac{AB \cdot BF}{N_2}$

$R := \frac{BF \cdot AB}{AB - EF}$ $R = 1.076613$

Definitions.

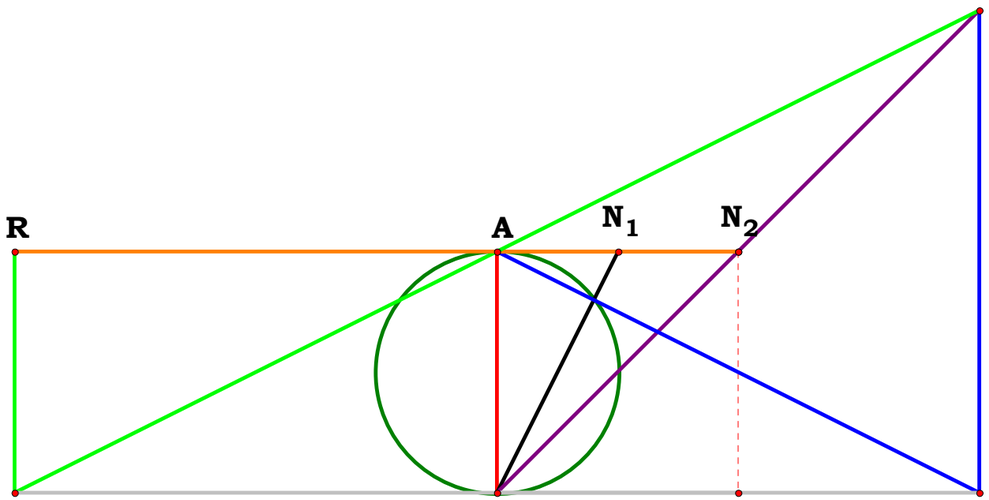
$R - \frac{N_2}{N_1 \cdot N_2 - 1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{A \cdot N_u}{{N_u}^2 - A \cdot B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

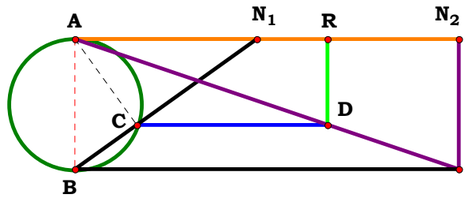
$R - \frac{Z \cdot p}{Y \cdot Z - p \cdot q} = 0$



$N_1 = 0.50000$
$N_2 = 1.00000$
R = -2.00000

$\frac{N_2}{N_1 \cdot N_2 - 1} - R = 0.00000$

2SMT1R5



$N_1 = 1.39216$
$N_2 = 2.94189$
$R = 1.94060$

Unit. $AB := 1$ Given. $N_1 := 1.39216$ $N_2 := 2.94189$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $CN_1 := \frac{N_1^2}{BN_1}$

$DR := \frac{AB \cdot CN_1}{BN_1}$ $R := N_2 \cdot DR$

$R = 1.940603$

Definitions.

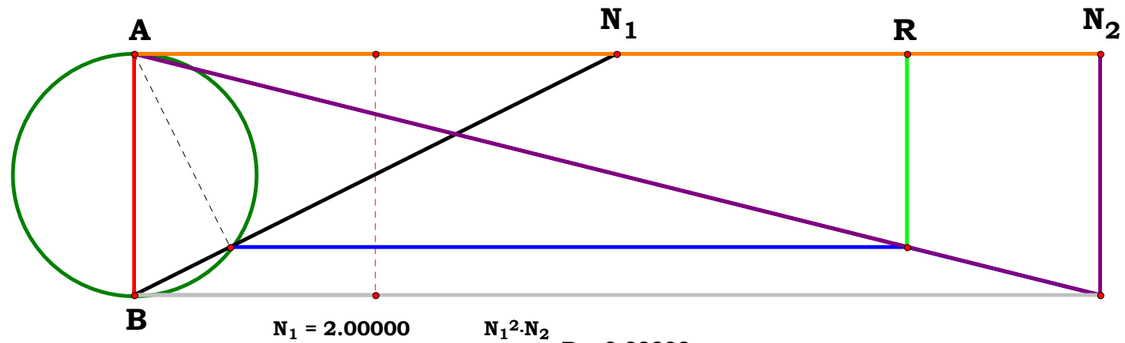
$R - \frac{N_1^2 \cdot N_2}{N_1^2 + 1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u^3}{B \cdot \left(A^2 + N_u^2\right)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

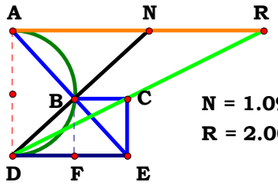
$R - \frac{Y^2 \cdot Z}{q \cdot \left(Y^2 + p^2\right)} = 0$



$N_1 = 2.00000$
$N_2 = 4.00000$
$R = 3.20000$

$\frac{N_1^2 \cdot N_2}{N_1^2+1} - R = 0.00000$

2SMT1R6



N = 1.09091
R = 2.00758

Unit. $AD := 1$ Given. $N := 1.09091$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BF := \frac{1}{1+N^2}$ $CE := BF$

$DE := \frac{1}{N}$ $R := \frac{DE \cdot AD}{CE}$

$R = 2.007576$

Definitions.

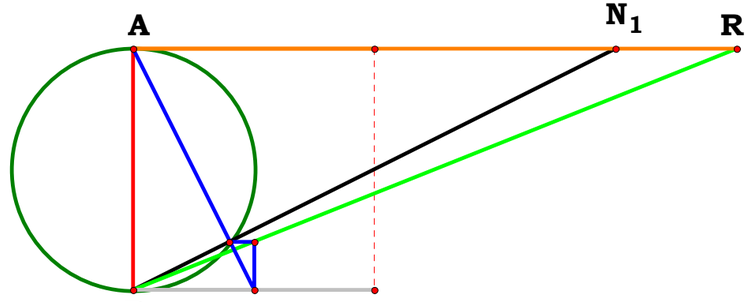
$R - \frac{N^2+1}{N} = 0$

$N - \frac{N_u}{A} = 0$

$R - \frac{A^2+N_u{}^2}{A \cdot N_u} = 0$

$N - \frac{Z}{q} = 0$

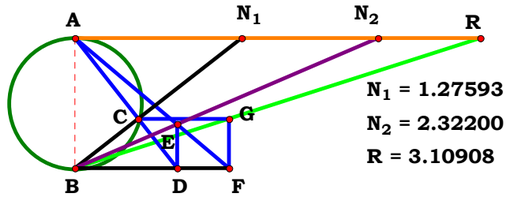
$R - \frac{Z^2+q^2}{Z \cdot q} = 0$



$N_1 = 2.00000$ $\frac{N_1{}^2+1}{N_1} - R = 0.00000$

$R = 2.50000$

2SMT1R7



Unit. $AB := 1$ Given. $N_1 := 1.27593$ $N_2 := 2.32200$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BD := \frac{1}{N_1}$ $DE := \frac{AB \cdot BD}{N_2}$

$BF := \frac{BD}{(AB - DE)}$ $BN_1 := \sqrt{N_1^2 + AB^2}$

$BC := \frac{AB^2}{BN_1}$ $FG := \frac{AB \cdot BC}{BN_1}$

$R := \frac{BF}{FG}$ $R = 3.109074$

Definitions.

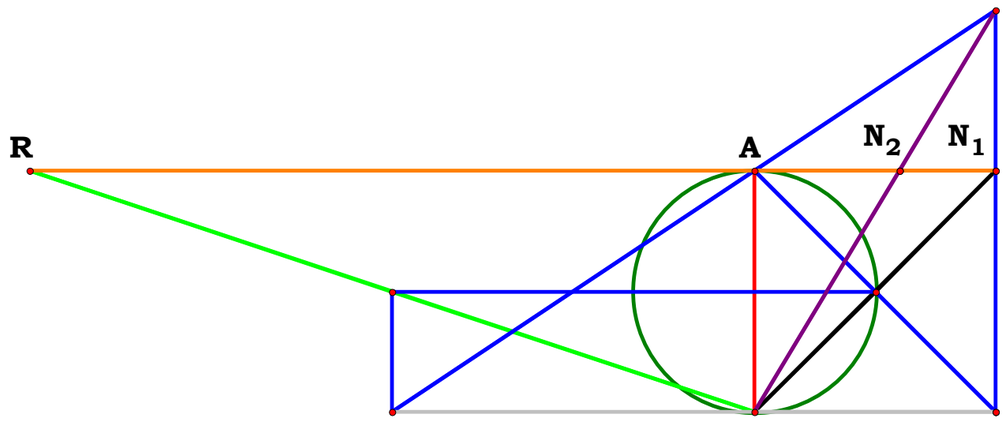
$$R - \frac{N_2 \cdot \left(N_1^2 + 1\right)}{N_1 \cdot N_2 - 1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot \left(N_u^2 - A \cdot B\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

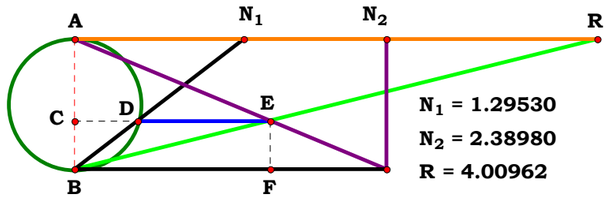
$$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{p \cdot (Y \cdot Z - p \cdot q)} = 0$$



N1 = 1.00000
N2 = 0.60000
R = -3.00000

$\frac{N_2 \cdot (N_1^2+1)}{N_1 \cdot N_2 - 1} - R = 0.00000$

2SMT1R8



Unit. $AB := 1$ Given. $N_1 := 1.29530$ $N_2 := 2.38980$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$

$BC := \frac{AB \cdot BD}{BN_1}$ $AC := AB - BC$

$BF := N_2 \cdot AC$ $R := \frac{BF}{BC}$

$R = 4.009611$

Definitions.

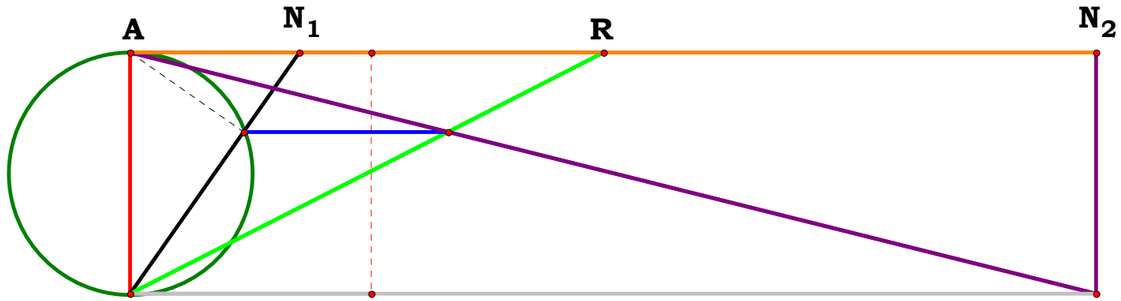
$R - N_1^2 \cdot N_2 = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u^3}{A^2 \cdot B} = 0$

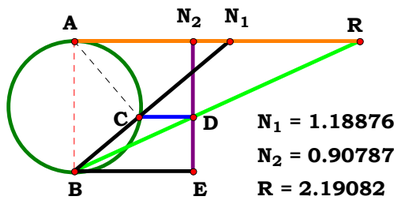
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y^2 \cdot Z}{p^2 \cdot q} = 0$



B $N_1 = 0.70000$ $N_2 = 4.00000$ $R = 1.96000$ $N_1^2 \cdot N_2 - R = 0.00000$

2SMT1R9



Unit. $AB := 1$ Given. $N_1 := 1.18876$ $N_2 := .90787$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BC := \frac{AB^2}{BN_1}$

$DE := \frac{AB \cdot BC}{BN_1}$ $R := \frac{N_2}{DE}$

$R = 2.190827$

Definitions.

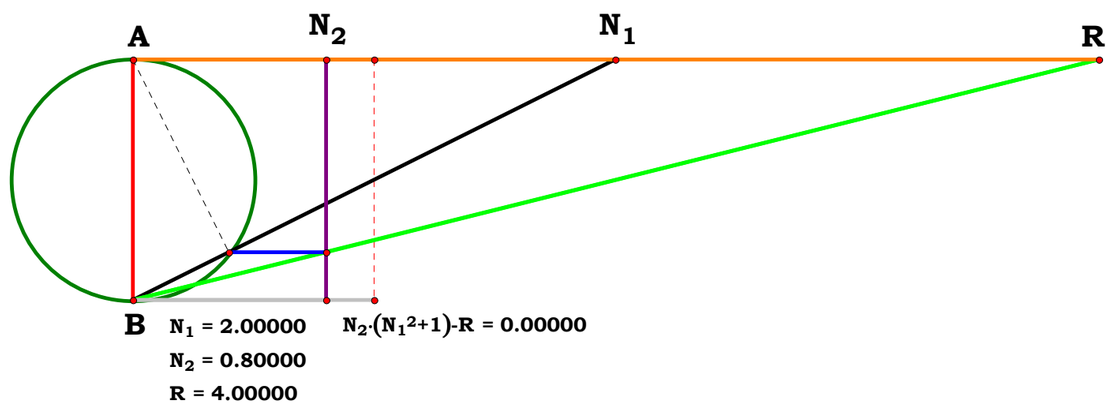
$R - N_2 \cdot \left(N_1^2 + 1\right) = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

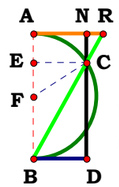
$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{p^2 \cdot q} = 0$



2SMT1R10



N = 0.42424
R = 0.55485

Unit. $AB := 1$ Given. $N := .42424$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

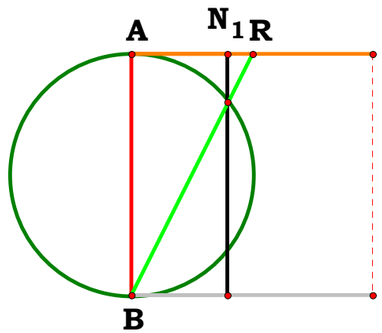
Descriptions.

$BF := \frac{AB}{2}$ $BE := N$

$EF := \sqrt{BF^2 - BE^2}$

$BD := \frac{AB}{2} + EF$ $R := \frac{N \cdot AB}{BD}$

$R = 0.554842$



$N_1 = 0.40000$

$R = 0.50000$

$\frac{2 \cdot N_1}{(1-4 \cdot N_1^2)^{\frac{1}{2}}+1} - R = 0.00000$

Definitions.

$R - \frac{2N}{(1 - 4 \cdot N^2)^{\frac{1}{2}} + 1} = 0$

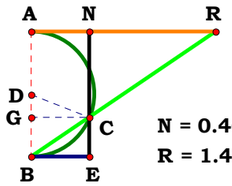
$N - \frac{N_u}{A} = 0$

$R - \frac{2 \cdot N_u}{A + \sqrt{A^2 - 4 \cdot N_u^2}} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q - \sqrt{q^2 - 4 \cdot Z^2}}{2 \cdot Z} = 0$

2SMT1R11



N = 0.46465
R = 1.47353

Unit. $AB := 1$ **Given.** $N := .46465$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$DC := \frac{AB}{2}$ $CG := N$

$DG := \sqrt{DC^2 - CG^2}$

$CE := \frac{AB}{2} - DG$ $R := \frac{N \cdot AB}{CE}$

$R = 1.473502$

Definitions.

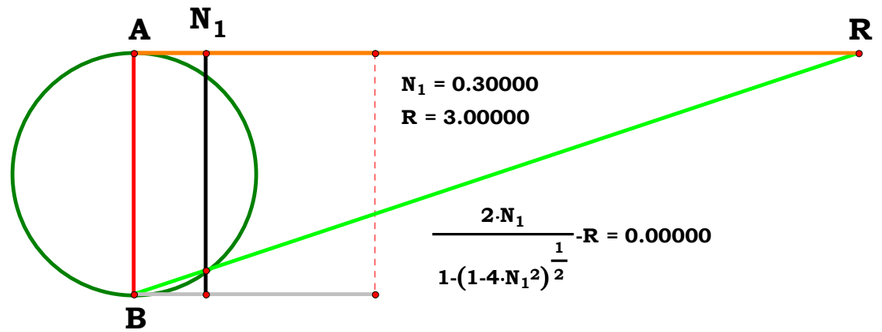
$$R - \frac{2N}{1 - \sqrt{1 - 4N^2}} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{2 \cdot N_u}{A - \sqrt{A^2 - 4 \cdot N_u^2}} = 0$$

$$N - \frac{Z}{q} = 0$$

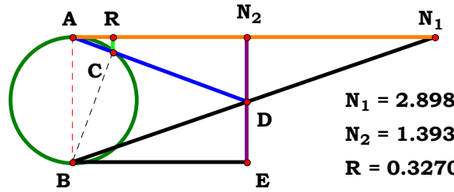
$$R - \frac{2 \cdot Z}{q - \sqrt{q^2 - 4 \cdot Z^2}} = 0$$



$N_1 = 0.30000$
$R = 3.00000$

$$\frac{2 \cdot N_1}{1 - (1 - 4 \cdot N_1^2)^{\frac{1}{2}}} - R = 0.00000$$

2SMT2R0



$N_1 = 2.89899$
$N_2 = 1.39394$
$R = 0.32707$

Unit. $AB := 1$ Given. $N_1 := 2.89899$ $N_2 := 1.39394$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$AB := 1 \quad DN_2 := 1 - \frac{N_2}{N_1}$

$AD := \sqrt{N_2^2 + DN_2^2} \quad AC := \frac{DN_2 \cdot AB}{AD}$

$R := \frac{AC \cdot N_2}{AD} \qquad R = 0.327074$

Definitions.

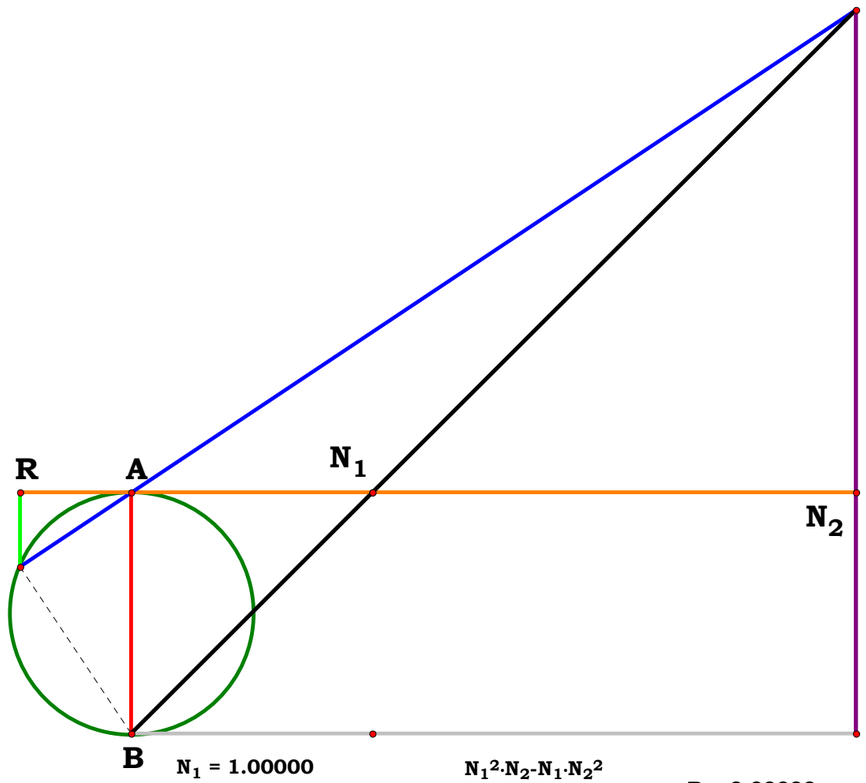
$$R - \frac{N_1^2 \cdot N_2 - N_1 \cdot N_2^2}{N_1^2 \cdot N_2^2 + N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u \cdot (B - A)}{A^2 - 2 \cdot A \cdot B + B^2 + N_u^2} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

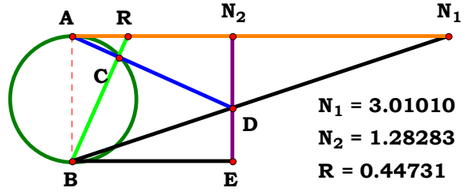
$$R - \frac{Y \cdot Z \cdot (Y \cdot q - Z \cdot p)}{Y^2 \cdot Z^2 + Y^2 \cdot q^2 - 2 \cdot Y \cdot Z \cdot p \cdot q + Z^2 \cdot p^2} = 0$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$R = -0.46154$

$$\frac{N_1^2 \cdot N_2 - N_1 \cdot N_2^2}{(N_1^2 \cdot N_2^2 + N_1^2 + N_2^2) - 2 \cdot N_1 \cdot N_2} - R = 0.00000$$

2SMT2R1



$N_1 = 3.01010$
$N_2 = 1.28283$
$R = 0.44731$

Unit. $AB := 1$ **Given.** $N_1 := 3.01010$ $N_2 := 1.28283$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$AB := 1$ $DN_2 := 1 - \frac{N_2}{N_1}$

$R := \frac{DN_2 \cdot AB}{N_2}$ $R = 0.447312$

Definitions.

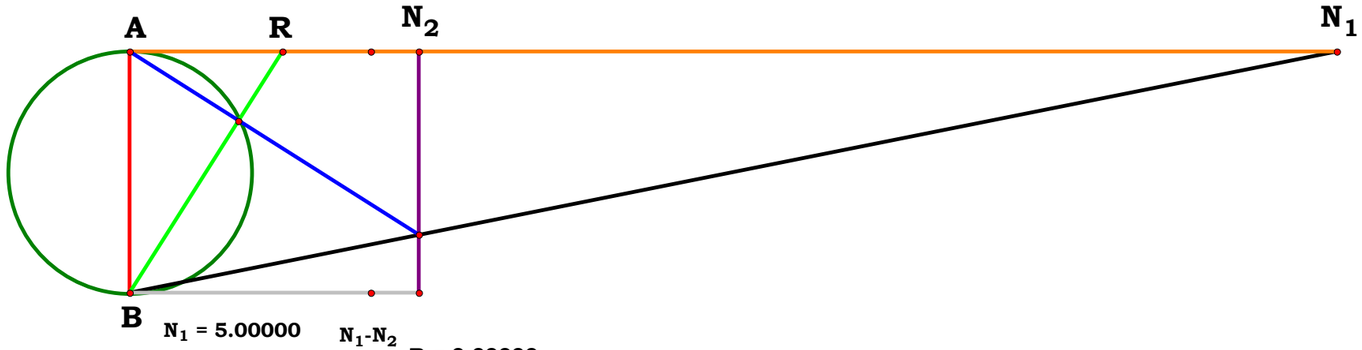
$R - \frac{N_1 - N_2}{N_1 \cdot N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{B - A}{N_u} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

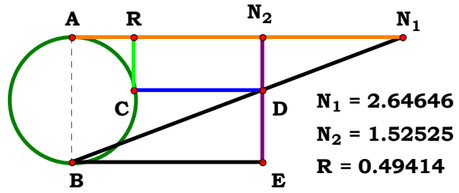
$R - \frac{Y \cdot q - Z \cdot p}{Y \cdot Z} = 0$



$N_1 = 5.00000$
$N_2 = 1.20000$
$R = 0.63333$

$\frac{N_1 - N_2}{N_1 \cdot N_2} - R = 0.00000$

2SMT2R2



Unit. $AB := 1$ Given. $N_1 := 2.64646$ $N_2 := 1.52525$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

Another way to construct a parabola, with a different equation.

$DE := \frac{N_2}{N_1}$ $DN_2 := 1 - DE$

$R := \sqrt{DE \cdot DN_2}$ $R = 0.494138$

Definitions.

$$R - \frac{\sqrt{N_1 \cdot N_2 - N_2^2}}{N_1} = 0$$

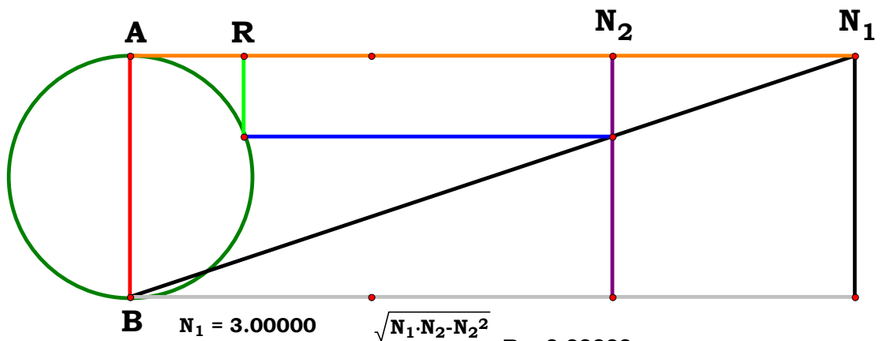
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

Notice that N_u disappeared.

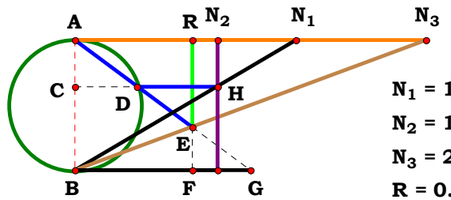
$$R - \frac{A \cdot \sqrt{(B - A)}}{B \cdot \sqrt{A}} = 0$$

$$N_1 - \frac{Y}{p} = 0 \quad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{p} \cdot \sqrt{Z \cdot (Y \cdot q - Z \cdot p)}}{Y \cdot q} = 0$$



2SMT2R3



$N_1 = 1.69242$
$N_2 = 1.09190$
$N_3 = 2.69478$
$R = 0.89872$

Unit. $AB := 1$ Given. $N_1 := 1.69242$ $N_2 := 1.09190$ $N_3 := 2.69478$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

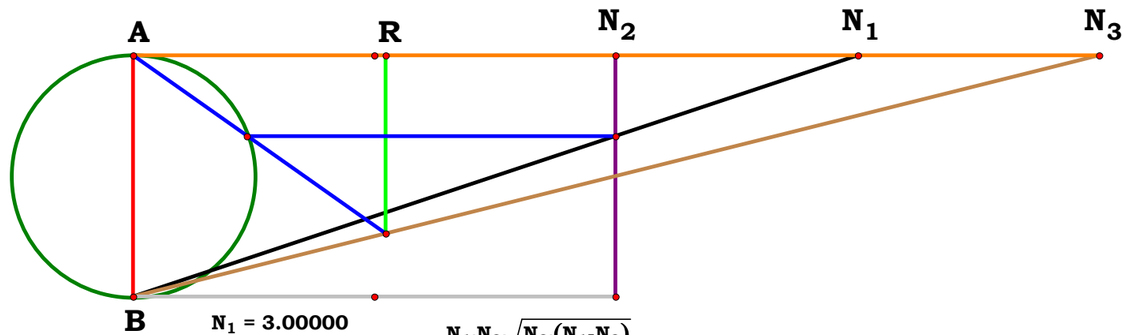
Descriptions.

$BC := \frac{N_2}{N_1}$ $AC := 1 - BC$

$CD := \sqrt{BC \cdot AC}$ $BG := \frac{CD}{AC}$

$R := \frac{N_3 \cdot BG}{N_3 + BG}$

$R = 0.898721$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$R = 1.04482$

$\frac{N_1 \cdot N_3 \cdot \sqrt{N_2 \cdot (N_1 - N_2)}}{N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)} + N_1 \cdot N_3 \cdot (N_1 - N_2)} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_3 \cdot \sqrt{N_2 \cdot (N_1 - N_2)}}{N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)} + N_1 \cdot N_3 \cdot (N_1 - N_2)} = 0$

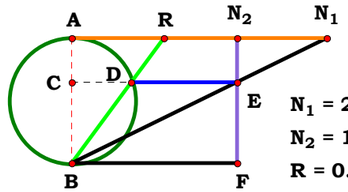
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \sqrt{A \cdot (B - A)}}{C \cdot \sqrt{A \cdot (B - A)} + N_u \cdot (B - A)} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot \sqrt{o} \cdot \sqrt{Y \cdot (X \cdot p - Y \cdot o)}}{X \cdot Z \cdot p - Y \cdot Z \cdot o + \sqrt{o} \cdot q \cdot \sqrt{Y \cdot (X \cdot p - Y \cdot o)}} = 0$

2SMT2R4



$N_1 = 2.04040$
$N_2 = 1.32323$
$R = 0.73620$

Unit. $AB := 1$ Given. $N_1 := 2.04040$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$AB := 1$ $EF := \frac{N_2}{N_1}$ $EN_2 := 1 - EF$

$CD := \sqrt{EF \cdot EN_2}$ $R := \frac{CD \cdot AB}{EF}$

$R = 0.736196$

Definitions.

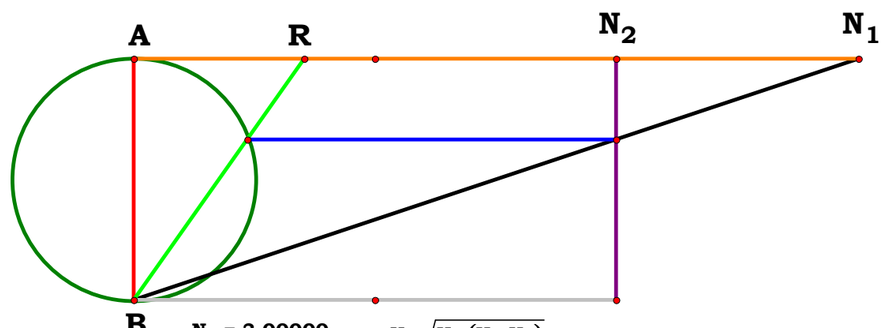
$$R - \frac{N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)}}{N_1 \cdot N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{B \cdot \sqrt{B - A}}{\sqrt{A \cdot B^2}} = 0$$

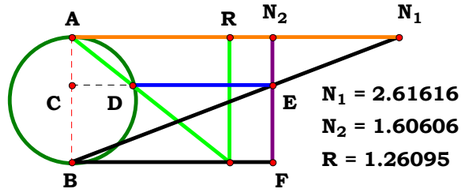
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{Z \cdot (Y \cdot q - Z \cdot p)}}{Z \cdot \sqrt{p}} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$\frac{N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)}}{N_1 \cdot N_2} - R = 0.00000$
$R = 0.70711$

2SMT2R5



Unit. $AB := 1$ Given. $N_1 := 2.61616$ $N_2 := 1.60606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$EF := \frac{N_2}{N_1}$ $EN_2 := 1 - EF$

$CD := \sqrt{EN_2 \cdot EF}$ $R := \frac{CD}{EN_2}$

$R = 1.260952$

Definitions.

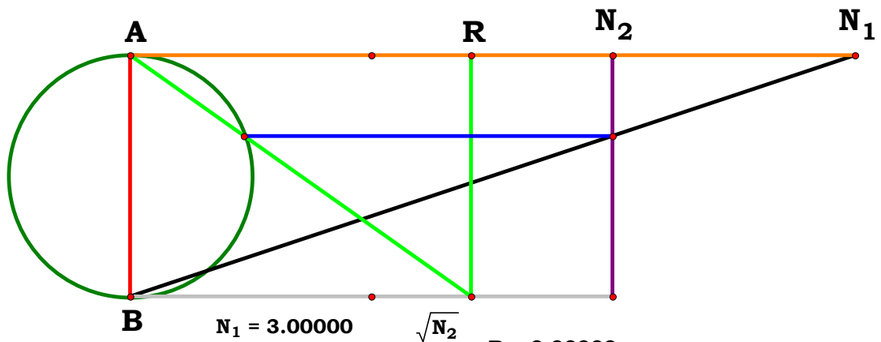
$$R - \frac{\sqrt{N_2}}{\sqrt{N_1 - N_2}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

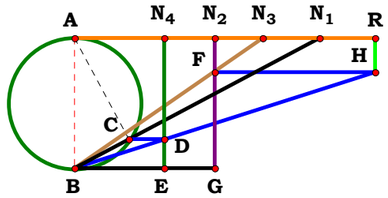
$$R - \frac{\sqrt{N_u} \cdot \sqrt{A \cdot B}}{\sqrt{B} \cdot \sqrt{B \cdot N_u - A \cdot N_u}} = 0$$

$$N_1 - \frac{Y}{p} = 0 \quad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Z} \cdot \sqrt{p \cdot q}}{\sqrt{q} \cdot \sqrt{Y \cdot q - Z \cdot p}} = 0$$



2SMT2R6



$N_1 = 1.87645$
$N_2 = 1.07253$
$N_3 = 1.44532$
$N_4 = 0.68746$
$R = 2.30640$

Unit. $AB := 1$ **Given.** $N_1 := 1.87645$ $N_2 := 1.07253$ $N_3 := 1.44532$ $N_4 := .68746$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BC := \frac{AB}{BN_1}$

$DE := \frac{BC}{BN_1}$ $FG := \frac{N_2}{N_3}$

$R := \frac{N_4}{DE} \cdot FG$ $R = 2.306394$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot \left(N_1^2 + 1\right)}{N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

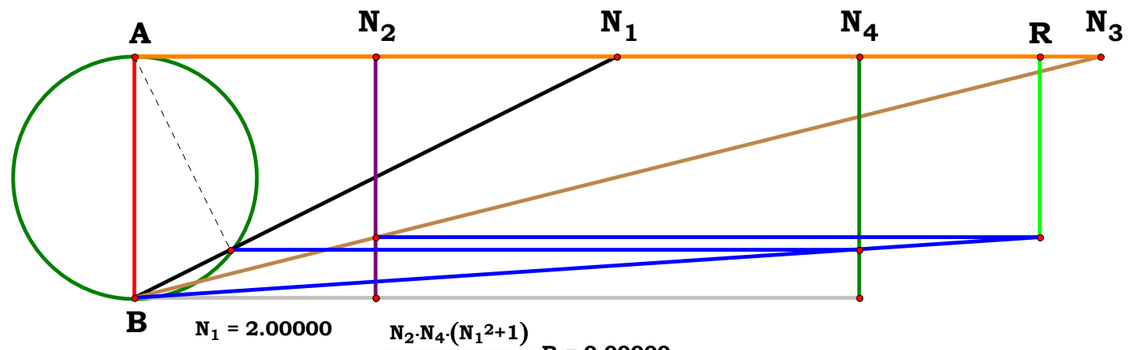
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

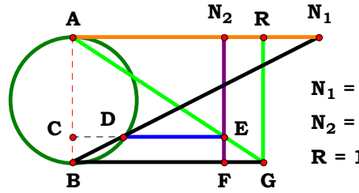
$$R - \frac{X \cdot Z \cdot o \cdot \left(W^2 + m^2\right)}{Y \cdot m^2 \cdot n \cdot p} = 0$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 3.75000$

$\frac{N_2 \cdot N_4 \cdot (N_1^2+1)}{N_3} - R = 0.00000$

2SMT2R7



$N_1 = 1.96970$
$N_2 = 1.21212$
$R = 1.52455$

Unit. $AB := 1$ Given. $N_1 := 1.96970$ $N_2 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{1 + N_1^2}$ $BD := \frac{AB^2}{BN_1}$

$EF := \frac{AB \cdot BD}{BN_1}$ $R := \frac{N_2 \cdot AB}{AB - EF}$

$R = 1.524545$

Definitions.

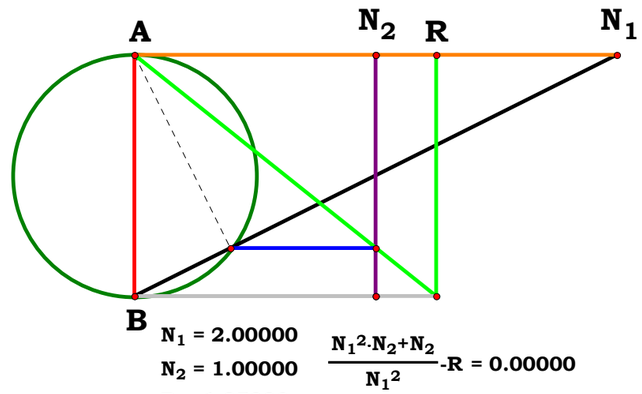
$R - \frac{N_1^2 \cdot N_2 + N_2}{N_1^2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{A^2 + N_u^2}{B \cdot N_u} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

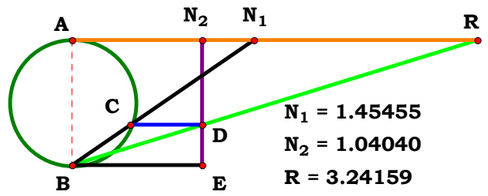
$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{Y^2 \cdot q} = 0$



$N_1 = 2.00000$
$N_2 = 1.00000$
$R = 1.25000$

$N_1^2 \cdot N_2 + N_2$
$\frac{}{N_1^2}$ -R = 0.00000

2SMT2R8



Unit. $AB := 1$ Given. $N_1 := 1.45455$ $N_2 := 1.04040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{1 + N_1^2}$ $BC := \frac{AB^2}{BN_1}$

$DE := \frac{AB \cdot BC}{BN_1}$ $R := \frac{N_2}{DE}$

$R = 3.241591$

Definitions.

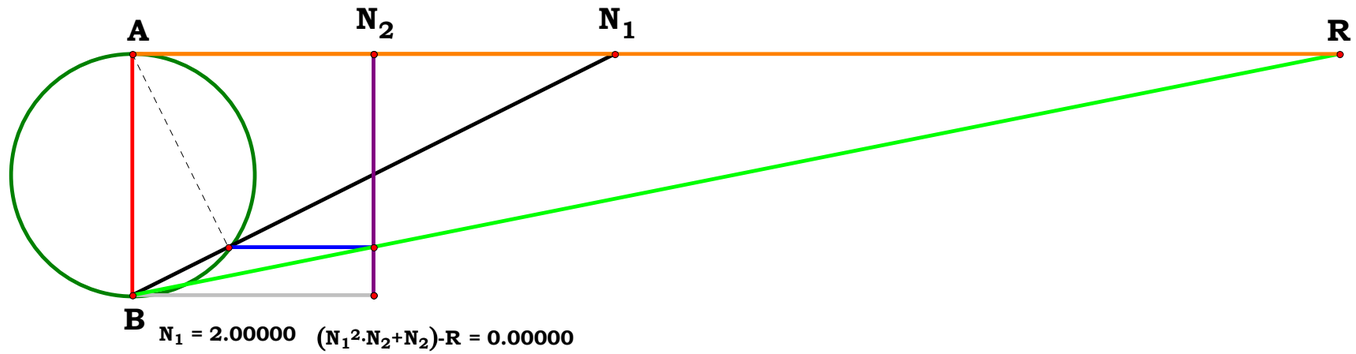
$R - \left(N_1^2 \cdot N_2 + N_2\right) = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{p^2 \cdot q} = 0$

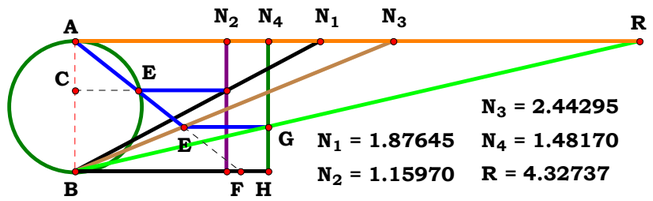


$N_1 = 2.00000$ $\left(N_1^2 \cdot N_2 + N_2\right) - R = 0.00000$

$N_2 = 1.00000$

$R = 5.00000$

2SMT2R9



Unit. $AB := 1$ Given. $N_1 := 1.87645$ $N_2 := 1.15970$ $N_3 := 2.44295$ $N_4 := 1.48170$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

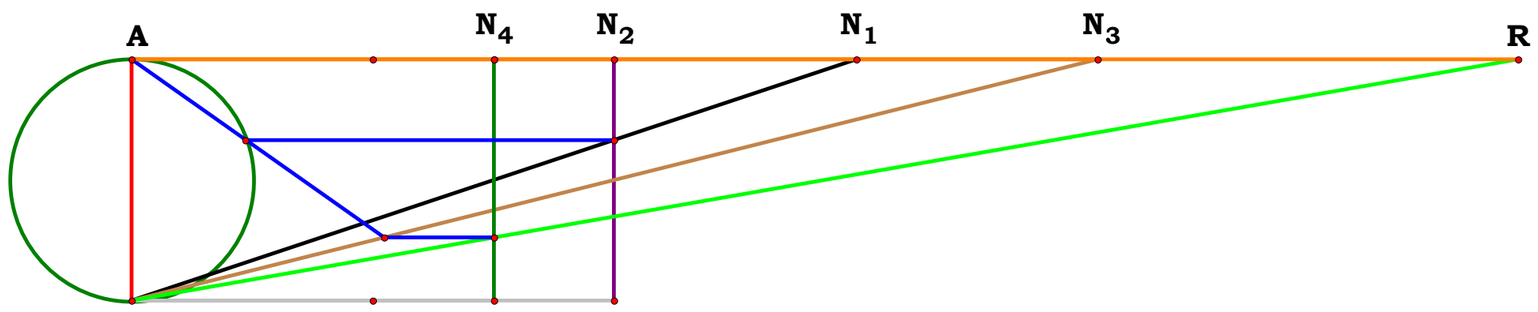
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := AB - \frac{N_2}{N_1}$ $CE := \sqrt{AC \cdot (AB - AC)}$

$BF := \frac{CE}{AC}$ $GH := \frac{BF}{BF + N_3}$

$R := \frac{N_4}{GH}$ $R = 4.327379$



Definitions.

$$R - \frac{N_4 \cdot \left[N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)} + N_1 \cdot N_3 \cdot (N_1 - N_2)\right]}{N_1 \cdot \sqrt{N_2 \cdot (N_1 - N_2)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

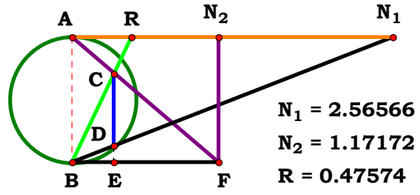
$$R - \frac{N_u \cdot \left[N_u \cdot (B - A) + C \cdot \sqrt{A \cdot (B - A)}\right]}{C \cdot D \cdot \sqrt{A \cdot (B - A)}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[W \cdot Y \cdot n - X \cdot Y \cdot m + \sqrt{m} \cdot o \cdot \sqrt{X \cdot (W \cdot n - X \cdot m)}\right]}{\sqrt{m} \cdot o \cdot p \cdot \sqrt{X \cdot (W \cdot n - X \cdot m)}} = 0$$

2SMT3R0



Unit. $AB := 1$ Given. $N_1 := 2.56566$ $N_2 := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{1 + N_1^2}$ $BD := \frac{AB^2}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $EF := N_2 - BE$

$CE := \frac{AB \cdot EF}{N_2}$ $R := \frac{BE \cdot AB}{CE}$

$R = 0.475743$

Definitions.

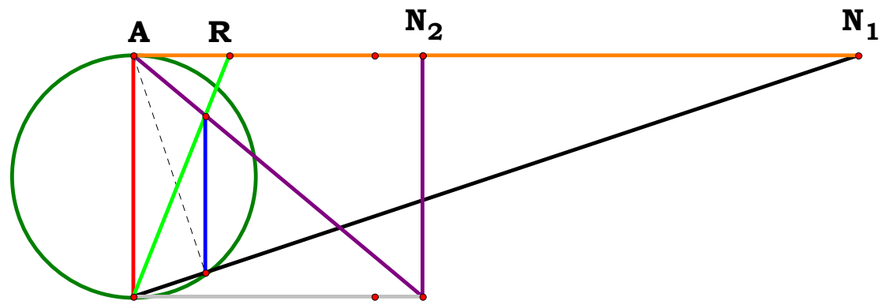
$$R - \frac{N_1 \cdot N_2}{N_1^2 \cdot N_2 + N_2 - N_1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A \cdot N_u}{A^2 - B \cdot A + N_u^2} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

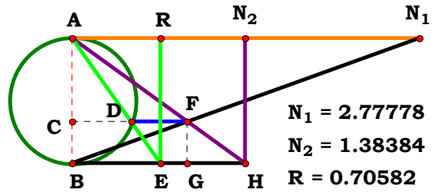
$$R - \frac{Y \cdot Z \cdot p}{Z \cdot Y^2 - q \cdot Y \cdot p + Z \cdot p^2} = 0$$



$N_1 = 3.00000$
$N_2 = 1.20000$
$R = 0.40000$

$\frac{N_1 \cdot N_2}{(N_1^2 \cdot N_2 + N_2) - N_1} - R = 0.00000$

2SMT3R1



Unit. $AB := 1$ Given. $N_1 := 2.77778$ $N_2 := 1.38384$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$FG := \frac{AB \cdot N_2}{N_1 + N_2}$ $CD := \sqrt{FG \cdot (1 - FG)}$

$R := \frac{CD \cdot AB}{AB - FG}$ $R = 0.70582$

Definitions.

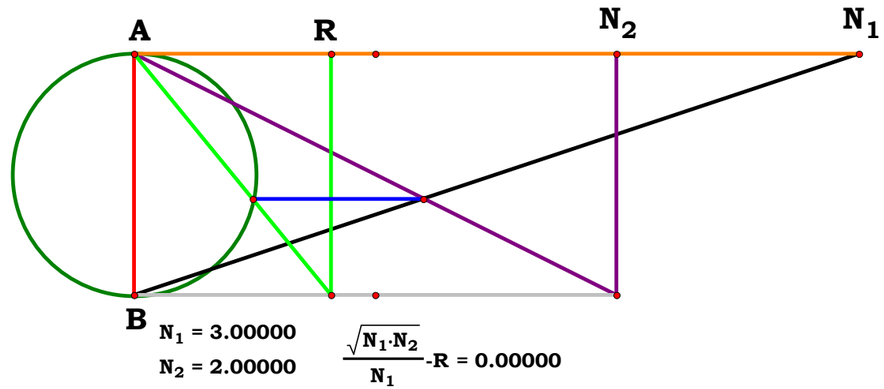
$R - \frac{\sqrt{N_1 \cdot N_2}}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

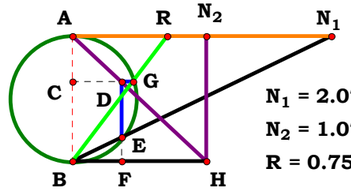
$R - \frac{A}{\sqrt{A \cdot B}} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{p \cdot \sqrt{Y \cdot Z}}{Y \cdot \sqrt{p \cdot q}} = 0$



2SMT3R2



$N_1 = 2.07071$
$N_2 = 1.07071$
$R = 0.75937$

Unit. $AB := 1$ Given. $N_1 := 2.07071$ $N_2 := 1.07071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{1 + N_1^2}$ $BE := \frac{AB^2}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $FH := N_2 - BF$

$FG := \frac{AB \cdot FH}{N_2}$ $AC := 1 - FG$

$CG := \sqrt{AC \cdot FG}$ $R := \frac{CG \cdot AB}{FG}$

$R = 0.759364$

Definitions.

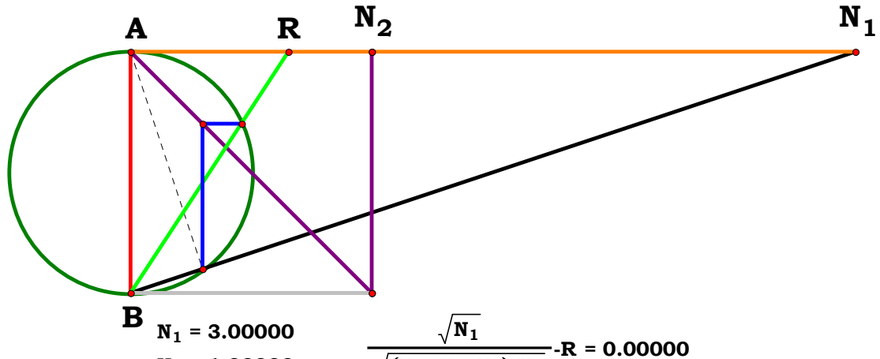
$$R - \frac{\sqrt{N_1}}{\sqrt{N_1^2 \cdot N_2 - N_1 + N_2}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{\sqrt{A \cdot B}}{\sqrt{\left(A^2 - B \cdot A + N_u^2\right)}} = 0$$

$$N_1 - \frac{Y}{p} = 0 \quad N_2 - \frac{Z}{q} = 0$$

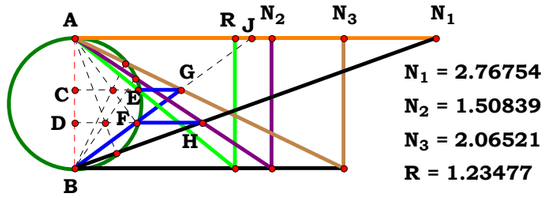
$$R - \frac{\sqrt{Y} \cdot \sqrt{p} \cdot \sqrt{q}}{\sqrt{Z \cdot Y^2 - q \cdot Y \cdot p + Z \cdot p^2}} = 0$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$R = 0.65465$

$$\frac{\sqrt{N_1}}{\sqrt{(N_1^2 \cdot N_2 + N_2) - N_1}} - R = 0.00000$$

2SMT3R3



Unit. $AB := 1$ Given. $N_1 := 2.76754$ $N_2 := 1.50839$ $N_3 := 2.06521$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

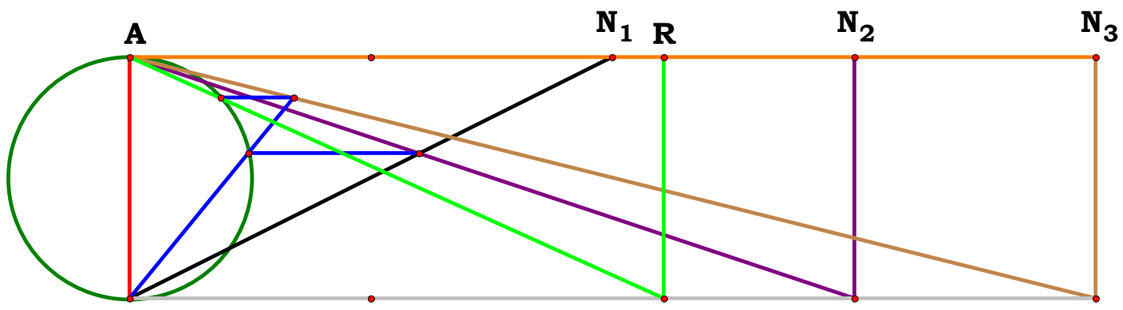
Descriptions.

$BD := \frac{N_2}{N_1 + N_2}$ $AD := \frac{N_1}{N_1 + N_2}$

$DF := \sqrt{BD \cdot AD}$ $AJ := \frac{DF}{BD} \cdot \frac{N_1 + N_2}{\sqrt{(N_1 + N_2)^2}}$

$AC := \frac{AJ}{AJ + N_3}$ $CE := \sqrt{AC \cdot (AB - AC)}$

$R := \frac{CE}{AC} \cdot \frac{N_3}{\sqrt{N_3^2}}$ $R = 1.234773$



Definitions.

$$R - \frac{(N_1 + N_2) \cdot \sqrt{N_2 \cdot N_3 \cdot \sqrt{N_1 \cdot N_2} \cdot (N_1 + N_2)}}{\sqrt{(N_1 + N_2)^3 \cdot \sqrt{N_1 \cdot N_2}}} = 0$$

B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 2.21336$

$$\frac{(N_1+N_2) \cdot \sqrt{N_2 \cdot N_3 \cdot \sqrt{N_1 \cdot N_2} \cdot (N_1+N_2)}}{\sqrt{(N_1+N_2)^3 \cdot \sqrt{N_1 \cdot N_2}}} - R = 0.00000$$

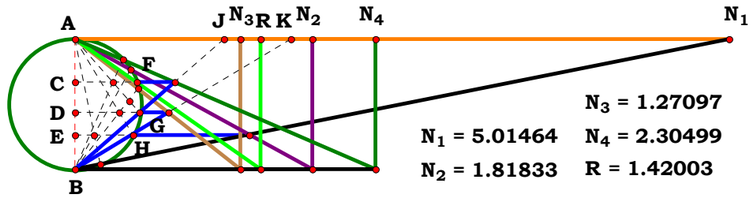
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{A \cdot N_u \cdot \sqrt{A + B}}{\sqrt{N_u \cdot (A + B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{o \cdot \sqrt{Y \cdot Z \cdot (X \cdot p + Y \cdot o) \cdot \sqrt{X \cdot Y}}}{\sqrt{X \cdot p + Y \cdot o} \cdot \sqrt{X \cdot Y} \cdot \sqrt{o \cdot q \cdot \sqrt{o \cdot p}}} = 0$$

2SMT3R4



Unit. $AB := 1$ **Given.** $N_1 := 5.01464$ $N_2 := 1.81833$ $N_3 := 1.27097$ $N_4 := 2.30499$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

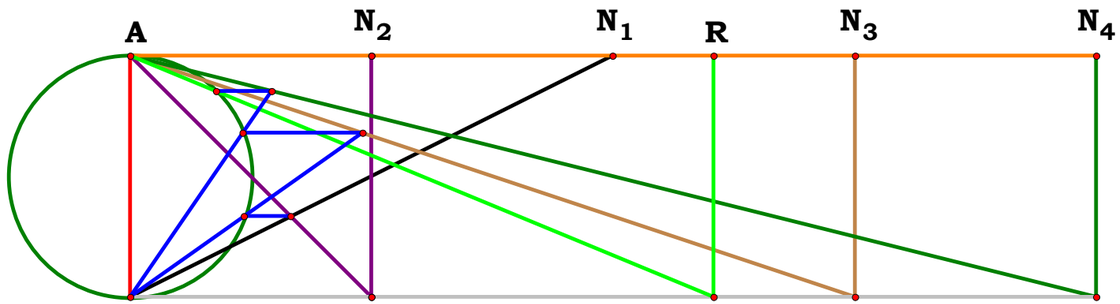
Descriptions.

$BE := \frac{N_2}{N_2 + N_1}$ $EH := \sqrt{BE \cdot (AB - BE)}$ $AK := \frac{EH}{BE}$

$BD := \frac{N_3}{AK + N_3}$ $DG := \sqrt{BD \cdot (AB - BD)}$ $AJ := \frac{DG}{BD}$

$BC := \frac{N_4}{AJ + N_4}$ $CF := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CF}{AB - BC}$ $R = 1.42003$



Definitions.

$R - \frac{\sqrt{N_2 \cdot N_3 \cdot N_4}}{\left(N_2 \cdot N_3 \cdot \sqrt{N_1 \cdot N_2}\right)^{\frac{1}{4}}} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{\sqrt{N_u^{\frac{3}{2}}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}{\sqrt{B \cdot C \cdot D}} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

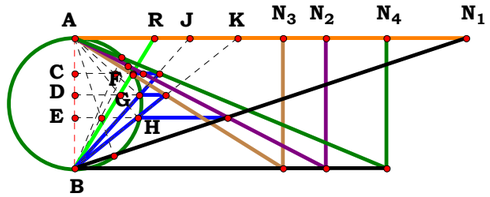
$R - \frac{\left(n \cdot o \cdot \sqrt{m \cdot n}\right)^{\frac{1}{4}} \cdot \sqrt{X \cdot Y \cdot Z}}{\left(X \cdot Y \cdot \sqrt{W \cdot X}\right)^{\frac{1}{4}} \cdot \sqrt{n \cdot o \cdot p}} = 0$

B

$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 2.41369$

$\frac{(N_1+N_2) \cdot \sqrt{N_2 \cdot N_3 \cdot N_4 \cdot (N_1+N_2)}}{\sqrt{(N_1+N_2)^3} \cdot \left(N_2 \cdot N_3 \cdot \sqrt{N_1 \cdot N_2}\right)^{\frac{1}{4}}} - R = 0.00000$

2SMT3R5



$N_1 = 3.00000$
$N_2 = 1.92488$
$N_3 = 1.60029$
$N_4 = 2.39216$
$R = 0.60764$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.92488$ $N_3 := 1.60029$ $N_4 := 2.39216$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

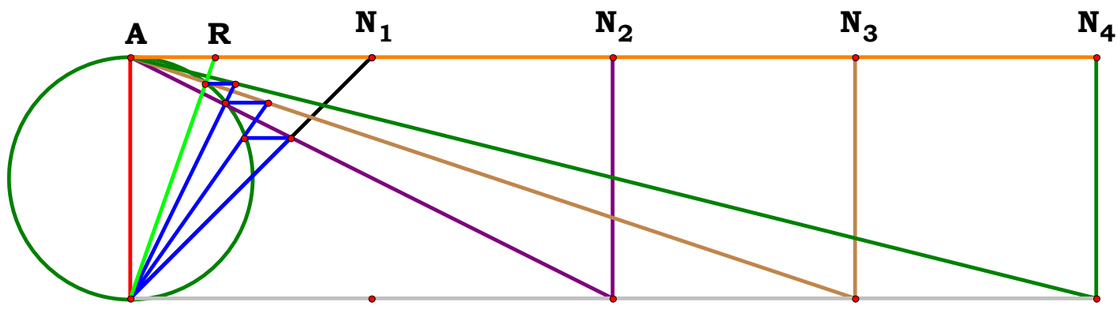
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BE := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{BE \cdot (AB - BE)}$ $AK := \frac{EH}{BE}$ $BD := \frac{N_3}{AK + N_3}$

$DG := \sqrt{BD \cdot (AB - BD)}$ $AJ := \frac{DG}{BD}$ $BC := \frac{N_4}{AJ + N_4}$

$CF := \sqrt{BC \cdot (AB - BC)}$ $R := \frac{CF}{BC}$ $R = 0.607638$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 0.34839$

$\frac{(N_1 \cdot N_2)^{\frac{1}{8}}}{(N_2 \cdot N_3 \cdot N_4^2)^{\frac{1}{4}}} - R = 0.00000$

Definitions.

$$R - \frac{(N_1 \cdot N_2)^{\frac{1}{8}}}{(N_2 \cdot N_3 \cdot N_4^2)^{\frac{1}{4}}} = 0$$

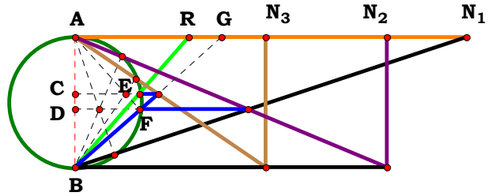
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(B \cdot C \cdot D^2)^{\frac{1}{4}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{(W \cdot X)^{\frac{1}{8}} \cdot (n \cdot o \cdot p^2)^{\frac{1}{4}}}{(m \cdot n)^{\frac{1}{8}} \cdot (X \cdot Y \cdot Z^2)^{\frac{1}{4}}} = 0$$

2SMT3R6



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 1.46469$
$R = 0.87462$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 1.46469$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

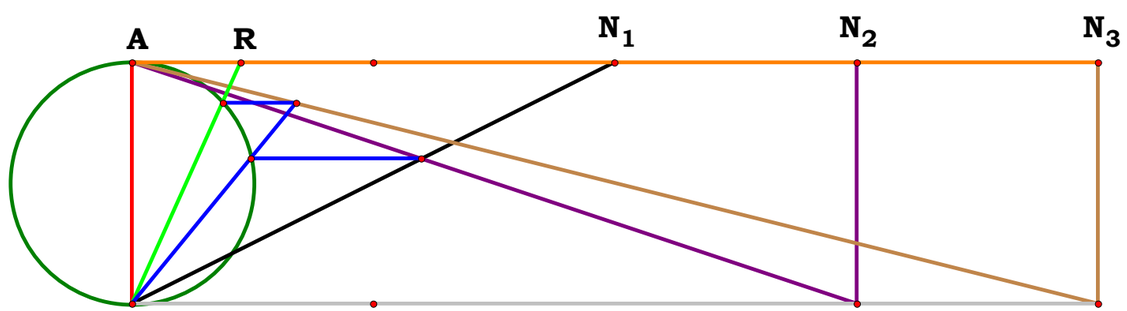
Descriptions.

$BD := \frac{N_2}{N_1 + N_2}$ $DF := \sqrt{BD \cdot (AB - BD)}$

$AG := \frac{DF}{BD}$ $BC := \frac{N_3}{AG + N_3}$

$CE := \sqrt{BC \cdot (AB - BC)}$ $R := \frac{CE}{BC}$

$R = 0.874615$



Definitions.

$$R - \frac{(N_1 \cdot N_2)^{\frac{1}{4}}}{(N_2 \cdot N_3)^{\frac{1}{2}}} = 0$$

B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.45180$

$$\frac{(N_1 \cdot N_2)^{\frac{1}{4}}}{(N_2 \cdot N_3)^{\frac{1}{2}}} - R = 0.00000$$

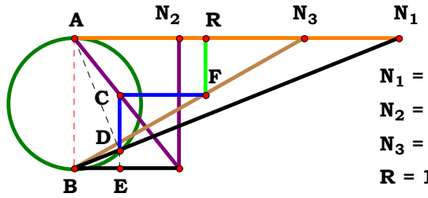
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{B \cdot C}}{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{(X \cdot Y)^{\frac{1}{4}} \cdot \sqrt{p \cdot q}}{\sqrt{Y \cdot Z} \cdot (o \cdot p)^{\frac{1}{4}}} = 0$$

2SMT3R7



$N_1 = 2.48665$
$N_2 = 0.80133$
$N_3 = 1.76495$
$R = 1.00251$

Unit. $AB := 1$ **Given.** $N_1 := 2.48665$ $N_2 := .80133$ $N_3 := 1.76495$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB}{BN_1}$

$BE := N_1 \cdot \frac{BD}{BN_1}$ $CE := \frac{N_2 - BE}{N_2}$

$R := N_3 \cdot CE$ $R = 1.002513$

Definitions.

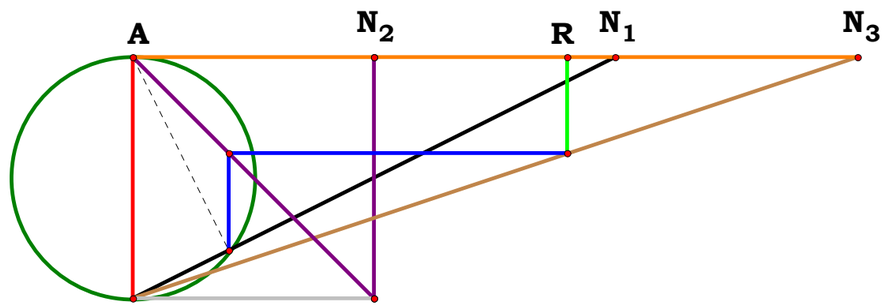
$$R - \frac{N_3 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)}{N_2 \cdot \left(N_1^2 + 1\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{C \cdot \left(A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

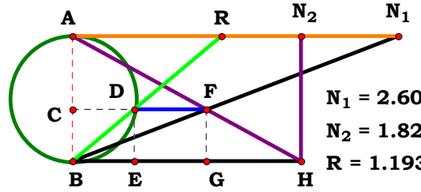
$$R - \frac{Z \cdot \left(Y \cdot X^2 - p \cdot X \cdot o + Y \cdot o^2\right)}{Y \cdot q \cdot \left(X^2 + o^2\right)} = 0$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$R = 1.80000$

$\frac{N_3 \cdot ((N_1^2 \cdot N_2 + N_2) - N_1)}{N_2 \cdot (N_1^2 + 1)} - R = 0.00000$

2SMT3R8



Unit. $AB := 1$ Given. $N_1 := 2.60606$ $N_2 := 1.82828$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$FG := \frac{AB \cdot N_2}{N_1 + N_2}$ $CD := \sqrt{FG \cdot (1 - FG)}$

$R := \frac{CD \cdot AB}{FG}$ $R = 1.193908$

Definitions.

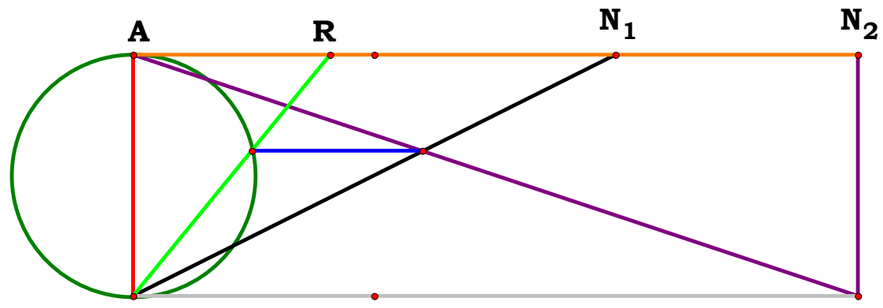
$R - \frac{(N_1 \cdot N_2)^{\frac{1}{2}}}{N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{B}{\sqrt{A \cdot B}} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

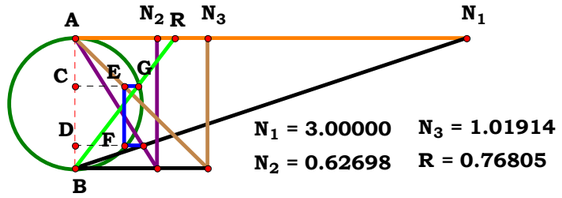
$R - \frac{q \cdot \sqrt{Y \cdot Z}}{Z \cdot \sqrt{p \cdot q}} = 0$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 0.81650$

$\frac{(N_1 \cdot N_2)^{\frac{1}{2}}}{N_2} - R = 0.00000$

2SMT3R9



$N_1 = 3.00000$ $N_3 = 1.01914$
$N_2 = 0.62698$ $R = 0.76805$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .62698$ $N_3 := 1.01914$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

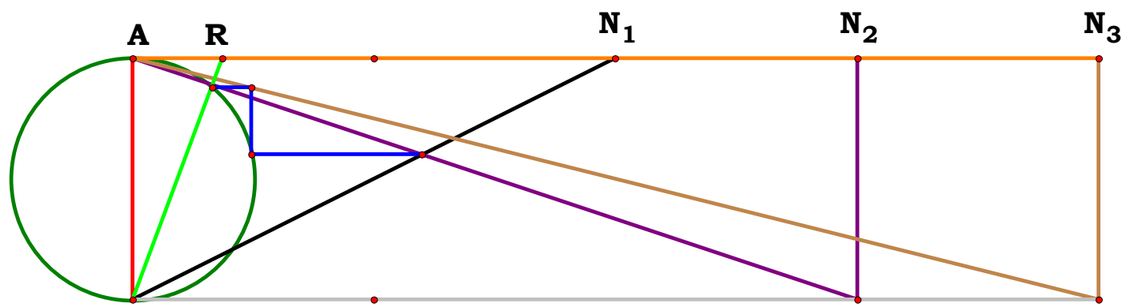
$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BD := \frac{N_2}{N_1 + N_2} \qquad DF := \sqrt{BD \cdot (AB - BD)}$$

$$AC := \frac{DF}{N_3} \qquad CG := \sqrt{AC \cdot (AB - AC)}$$

$$R := \frac{CG}{AB - AC} \qquad R = 0.768049$$



Definitions.

$$R - \frac{\sqrt{\sqrt{N_1 \cdot N_2} \cdot N_3 \cdot (N_1 + N_2) - N_1 \cdot N_2}}{N_1 \cdot N_3 - \sqrt{N_1 \cdot N_2} + N_2 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot B \cdot C \cdot \sqrt{A \cdot B \cdot \left[N_u \cdot (A + B) - C \cdot \sqrt{A \cdot B}\right]}}{\left[\sqrt{A \cdot B} \cdot N_u \cdot (A + B) - A \cdot B \cdot C\right] \cdot \sqrt{A \cdot B \cdot C \cdot \sqrt{A \cdot B}}} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

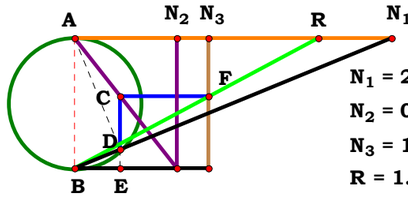
$$R - \frac{o \cdot p \cdot q \cdot \sqrt{o \cdot p} \cdot \sqrt{X \cdot Z \cdot p \cdot \sqrt{X \cdot Y} + Y \cdot Z \cdot o \cdot \sqrt{X \cdot Y} - X \cdot Y \cdot q \cdot \sqrt{o \cdot p}}}{\left(X \cdot Z \cdot p \cdot \sqrt{o \cdot p} + Y \cdot Z \cdot o \cdot \sqrt{o \cdot p} - o \cdot p \cdot q \cdot \sqrt{X \cdot Y}\right) \cdot \sqrt{o \cdot p \cdot q \cdot \sqrt{o \cdot p}}} = 0$$

B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.37359$

$$\frac{\sqrt{\sqrt{(N_1 \cdot N_2)} \cdot N_3 \cdot (N_1 + N_2) - (N_1 \cdot N_2)}}{(N_1 \cdot N_3 + N_2 \cdot N_3) - \sqrt{(N_1 \cdot N_2)}} - R = 0.00000$$

2SMT3R10



$N_1 = 2.42854$
$N_2 = 0.78196$
$N_3 = 1.02883$
$R = 1.87144$

Unit. $AB := 1$ **Given.** $N_1 := 2.42854$ $N_2 := .78196$ $N_3 := 1.02883$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $FN_3 := \frac{BE}{N_2}$

$R := \frac{N_3}{AB - FN_3}$ $R = 1.871437$

Definitions.

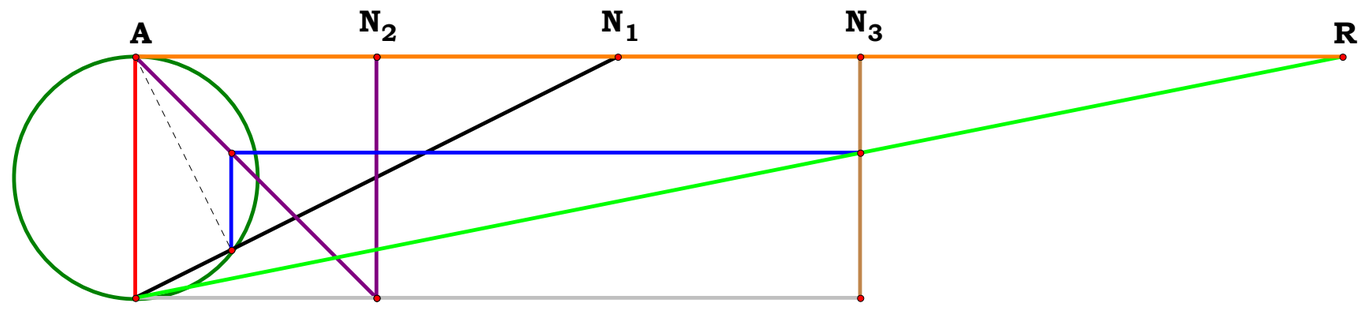
$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1^2 \cdot N_2 - N_1 + N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{C \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

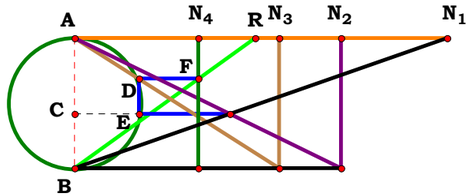
$$R - \frac{Y \cdot Z \cdot \left(X^2 + o^2\right)}{q \cdot \left(Y \cdot X^2 - p \cdot X \cdot o + Y \cdot o^2\right)} = 0$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$R = 5.00000$

$\frac{N_2 \cdot N_3 \cdot (N_1^2+1)}{(N_1^2 \cdot N_2 + N_2) - N_1} - R = 0.00000$

2SMT3R11



$N_1 = 2.85471$
$N_2 = 2.04111$
$N_3 = 1.57123$
$N_4 = 0.94898$
$R = 1.38294$

Unit. $AB := 1$ Given. $N_1 := 2.85471$ $N_2 := 2.04111$ $N_3 := 1.57123$ $N_4 := .94898$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

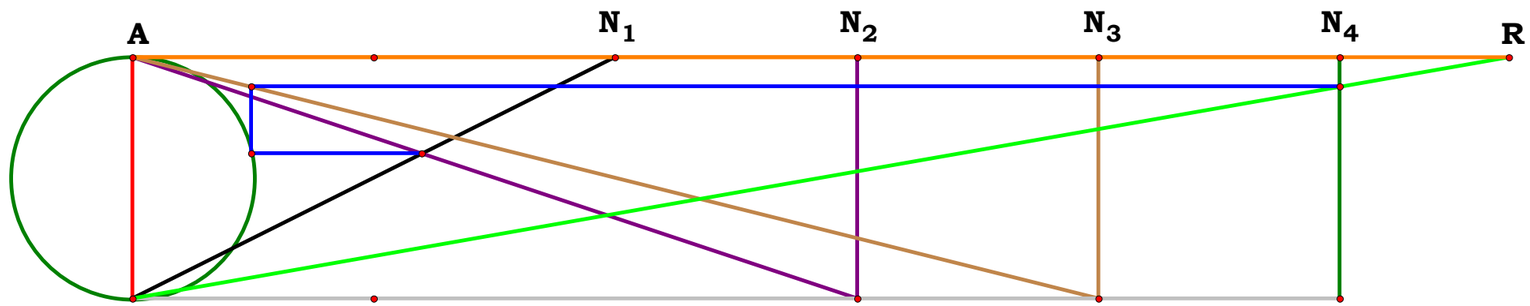
$BC := \frac{N_2}{N_1 + N_2}$ $CE := \sqrt{BC \cdot (AB - BC)}$

$FN_4 := \frac{CE}{N_3}$ $R := \frac{N_4}{AB - FN_4}$

$R = 1.382944$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2) - \sqrt{N_1 \cdot N_2}} = 0$$



$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^{\,2} \cdot (A + B) \cdot \sqrt{A \cdot B}}{D \cdot \left[\sqrt{A \cdot B} \cdot N_u \cdot (A + B) - A \cdot B \cdot C\right]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0$$

$$N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

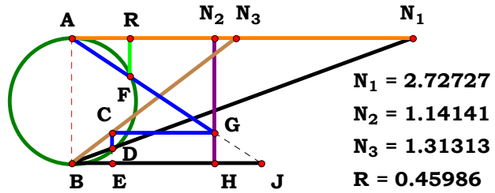
$$R - \frac{Y \cdot Z \cdot (W \cdot n + X \cdot m) \cdot \sqrt{m \cdot n}}{p \cdot \left[\sqrt{m \cdot n} \cdot Y \cdot (W \cdot n + X \cdot m) - m \cdot n \cdot o \cdot \sqrt{W \cdot X}\right]} = 0$$

B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 5.69784$

$$\frac{N_3 \cdot N_4 \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2) - \sqrt{N_1 \cdot N_2}} - R = 0.00000$$

2SMT4R0



$N_1 = 2.72727$
$N_2 = 1.14141$
$N_3 = 1.31313$
$R = 0.45986$

Descriptions.

$$BN_1 := \sqrt{N_1^2 + AB^2} \quad BD := \frac{AB^2}{BN_1} \quad BE := \frac{N_1 \cdot BD}{BN_1}$$

$$CE := \frac{AB \cdot BE}{N_3} \quad BJ := \frac{N_2 \cdot AB}{AB - CE} \quad AJ := \sqrt{AB^2 + BJ^2}$$

$$AF := \frac{AB^2}{AJ} \quad R := \frac{BJ \cdot AF}{AJ} \quad R = 0.459865$$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) \cdot \left(N_1^2 \cdot N_3 - N_1 + N_3\right)}{N_3^2 \cdot \left(N_1^2 + 1\right)^2 \cdot \left(N_2^2 + 1\right) - 2 \cdot N_1 \cdot N_3 \cdot \left(N_1^2 + 1\right) + N_1^2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{B \cdot N_u \cdot \left(A^2 + N_u^2\right) \cdot \left(A^2 - C \cdot A + N_u^2\right)}{N_u^6 + N_u^4 \cdot \left(2 \cdot A^2 + B^2\right) + A \cdot N_u^2 \cdot \left(A^3 + 2 \cdot A \cdot B^2 - 2 \cdot C \cdot B^2\right) + A^2 \cdot B^2 \cdot (A - C)^2} = 0$$

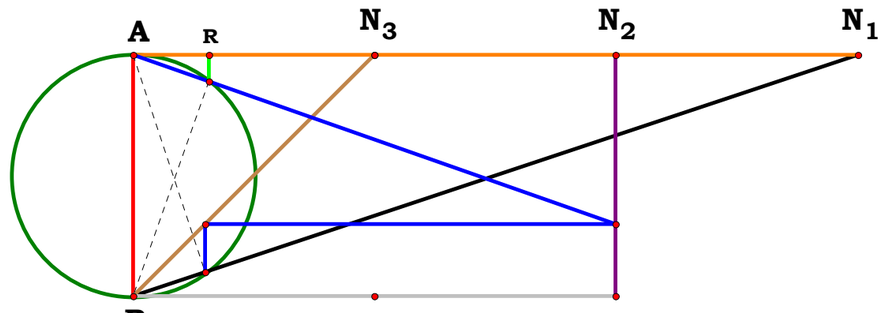
$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot Z \cdot \left(X^2 + o^2\right) \cdot \left(Z \cdot X^2 - q \cdot X \cdot o + Z \cdot o^2\right) \cdot p}{Y^2 \cdot Z^2 \cdot \left(X^2 + o^2\right)^2 + p^2 \cdot \left(Z \cdot X^2 - q \cdot X \cdot o + Z \cdot o^2\right)^2} = 0$$

Unit. $AB := 1$ **Given.** $N_1 := 2.72727$ $N_2 := 1.14141$ $N_3 := 1.31313$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

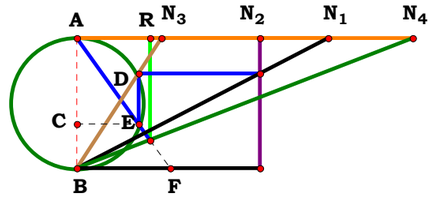
$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.31180$

$$\frac{N_2 \cdot N_3 \cdot (N_1^2+1) \cdot ((N_1^2 \cdot N_3 + N_3) - N_1)}{(N_3^2 \cdot (N_1^2+1)^2 \cdot (N_2^2+1) + N_1^2) - 2 \cdot N_1 \cdot N_3 \cdot (N_1^2+1)} - R = 0.00000$$

2SMT4R1



$N_1 = 1.92488$
$N_2 = 1.40185$
$N_3 = 0.65108$
$N_4 = 2.57619$
$R = 0.56269$

Unit. $AB := 1$ Given. $N_1 := 1.92488$ $N_2 := 1.40185$ $N_3 := .65108$ $N_4 := 2.57619$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$CE := N_3 \cdot \frac{N_2}{N_1} \qquad BC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CE^2}$$

$$BF := \frac{CE}{AB - BC} \qquad R := \frac{N_4 \cdot BF}{BF + N_4}$$

$R = 0.562683$

Definitions.

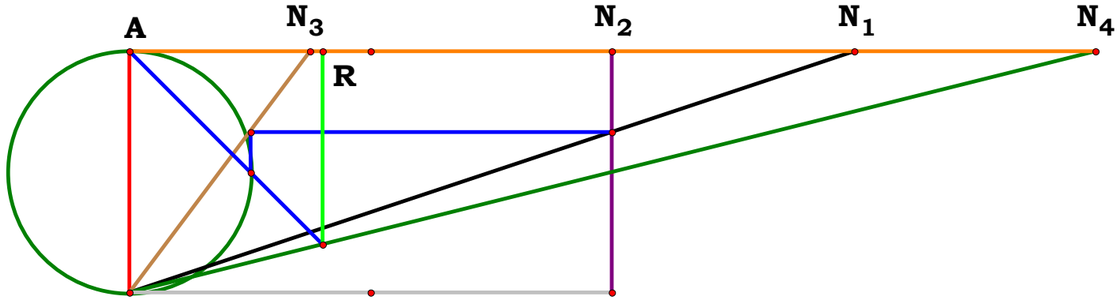
$$R - \frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 \cdot \sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1 \cdot (N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{2 \cdot A \cdot N_u^2}{\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

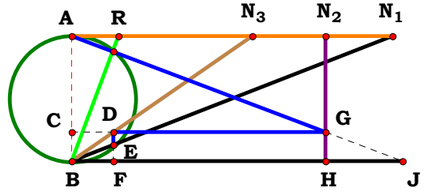
$$R - \frac{2 \cdot X \cdot Y \cdot Z \cdot m}{Z \cdot \sqrt{W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2} + W \cdot Z \cdot n \cdot o + 2 \cdot X \cdot Y \cdot m \cdot p} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.75000$
$N_4 = 4.00000$
$R = 0.80000$

$$\frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4}{N_1 \cdot N_4 \cdot \sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1 \cdot (N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_3)} - R = 0.00000$$

2SMT4R2



$N_1 = 2.56566$
$N_2 = 2.03030$
$N_3 = 1.44444$
$R = 0.37716$

Unit. $AB := 1$ Given. $N_1 := 2.56566$ $N_2 := 2.03030$ $N_3 := 1.44444$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

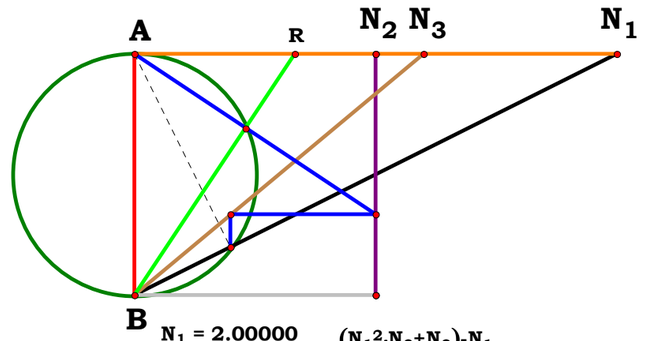
Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BE := \frac{AB^2}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $DF := \frac{AB \cdot BF}{N_3}$

$BJ := \frac{N_2 \cdot AB}{1 - DF}$ $R := \frac{AB^2}{BJ}$

$R = 0.377161$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 1.20000$
$R = 0.66667$

$\frac{(N_1^2 \cdot N_3 + N_3) - N_1}{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_1^2 \cdot N_3 + N_3 - N_1}{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3} = 0$

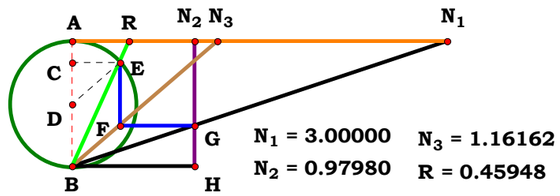
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{B \cdot \left(A^2 - C \cdot A + N_u^2\right)}{A^2 \cdot N_u + N_u^3} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{p \cdot \left(Z \cdot X^2 - q \cdot X \cdot o + Z \cdot o^2\right)}{Y \cdot Z \cdot \left(X^2 + o^2\right)} = 0$

2SMT4R3



$N_1 = 3.00000$ $N_3 = 1.16162$

$N_2 = 0.97980$ $R = 0.45948$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .97980$ $N_3 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$GH := \frac{N_2}{N_1}$ $CE := \frac{N_3 \cdot GH}{AB}$

$CD := \sqrt{\left(\frac{AB}{2}\right)^2 - CE^2}$ $BE := \frac{AB}{2} + CD$

$R := \frac{CE \cdot AB}{BE}$ $R = 0.459482$

Definitions.

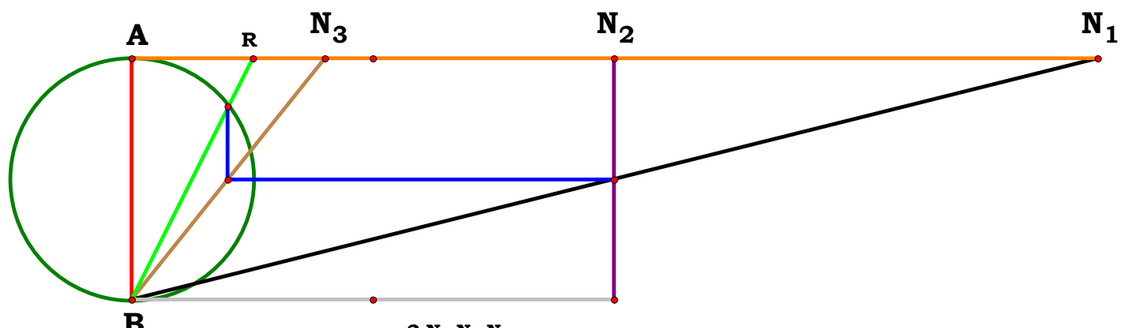
$$R - \frac{2 \cdot N_1 \cdot N_2 \cdot N_3}{\sqrt{\left(N_1^4 - 4 \cdot N_1^2 \cdot N_2^2 \cdot N_3^2\right) + N_1^2}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot A \cdot N_u^3}{\sqrt{B^2 \cdot C^2 \cdot N_u^4 - 4 \cdot A^2 \cdot N_u^6} + B \cdot C \cdot N_u^2} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2 \cdot X \cdot Y \cdot Z \cdot o}{\sqrt{X^4 \cdot p^2 \cdot q^2 - 4 \cdot X^2 \cdot Y^2 \cdot Z^2 \cdot o^2} + X^2 \cdot p \cdot q} = 0$$



$N_1 = 4.00000$

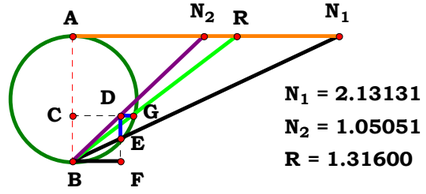
$N_2 = 2.00000$

$N_3 = 0.80000$

$\frac{2 \cdot N_1 \cdot N_2 \cdot N_3}{\sqrt{N_1^4 - 4 \cdot N_1^2 \cdot N_2^2 \cdot N_3^2 + N_1^2}} - R = 0.00000$

$R = 0.50000$

2SMT4R4



$N_1 = 2.13131$
$N_2 = 1.05051$
$R = 1.31600$

Unit. $AB := 1$ Given. $N_1 := 2.13131$ $N_2 := 1.05051$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BE := \frac{AB^2}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $DF := \frac{AB \cdot BF}{N_2}$

$EG := \sqrt{DF \cdot (AB - DF)}$ $R := \frac{EG \cdot AB}{DF}$

$R = 1.316$

Definitions.

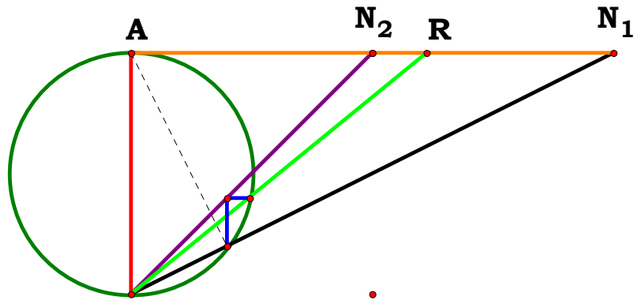
$$R - \frac{\sqrt{N_1 \cdot N_2^2 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)}}{N_1 \cdot N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A \cdot B \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{A^3 \cdot B^3}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{Y^3 \cdot Z^3 - q \cdot Y^2 \cdot Z^2 \cdot p + Y \cdot Z^3 \cdot p^2}}{Y \cdot Z \cdot \sqrt{p \cdot q}} = 0$$

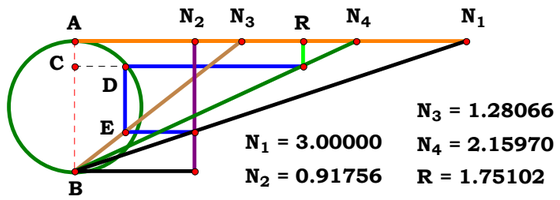


B

$N_1 = 2.00000$
$N_2 = 1.00000$
$R = 1.22474$

$$\frac{\sqrt{N_1 \cdot N_2^2 \cdot \left(\left(N_1^2 \cdot N_2 - N_1\right) + N_2\right)}}{N_1 \cdot N_2} - R = 0.00000$$

2SMT4R5



Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .91756$ $N_3 := 1.28066$ $N_4 := 2.15970$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$CD := N_3 \cdot \frac{N_2}{N_1}$ $AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$

$R := N_4 \cdot (AB - AC)$ $R = 1.751012$

Definitions.

$$R - \frac{N_4 \cdot \left(\sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1\right)}{2 \cdot N_1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

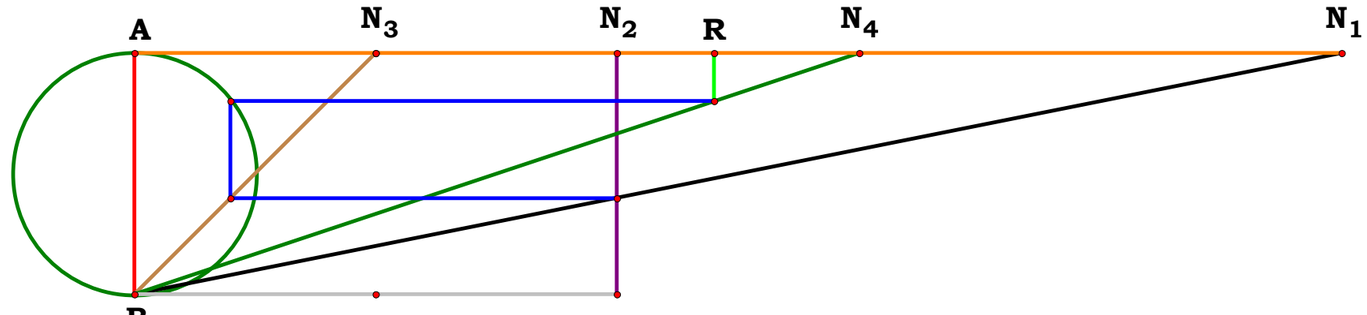
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u}{2 \cdot D \cdot B \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

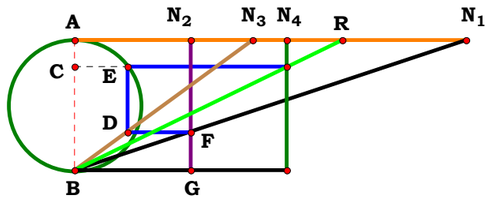
$$R - \frac{Z \cdot \left(\sqrt{W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2} + W \cdot n \cdot o\right)}{2 \cdot W \cdot p \cdot n \cdot o} = 0$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$R = 2.40000$

$\frac{N_4 \cdot \left(\sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1\right)}{2 \cdot N_1} - R = 0.00000$

2SMT4R6



$N_1 = 3.00000$
$N_2 = 0.88850$
$N_3 = 1.36783$
$N_4 = 1.62698$
$R = 2.05150$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := .88850$ $N_3 := 1.36783$ $N_4 := 1.62698$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$CE := N_3 \cdot \frac{N_2}{N_1}$ $AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CE^2}$

$R := \frac{N_4}{AB - AC}$ $R = 2.051499$

Definitions.

$$R - \frac{2 \cdot N_1 \cdot N_4}{\sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

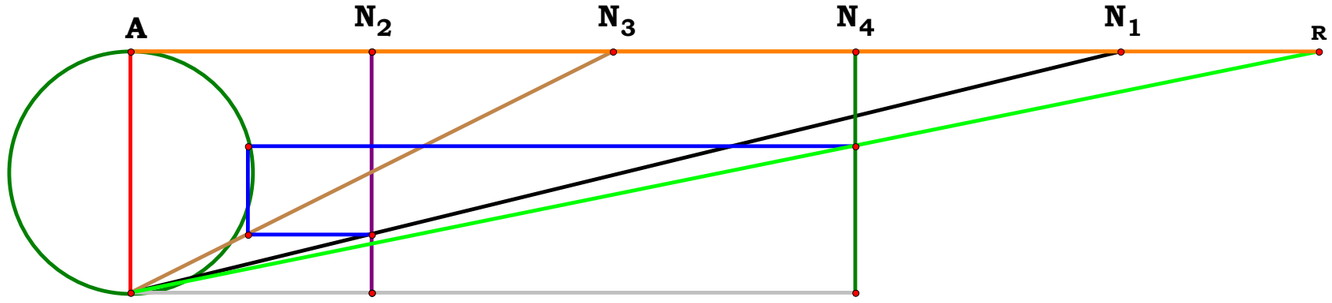
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot B \cdot C}{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

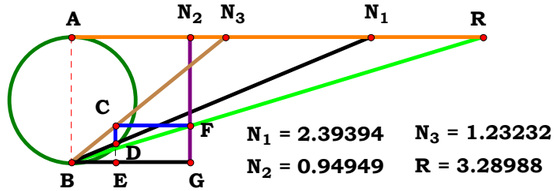
$$R - \frac{2 \cdot W \cdot Z \cdot n \cdot o}{p \cdot \left(\sqrt{W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2} + W \cdot n \cdot o\right)} = 0$$



$N_1 = 4.10000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 4.92000$

$$\frac{2 \cdot N_1 \cdot N_4}{\sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2} + N_1} - R = 0.00000$$

2SMT4R7



Unit. $AB := 1$ **Given.** $N_1 := 2.39394$ $N_2 := .94949$ $N_3 := 1.23232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $CE := \frac{AB \cdot BE}{N_3}$

$R := \frac{N_2 \cdot AB}{CE}$ $R = 3.289856$

Definitions.

$R - \frac{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

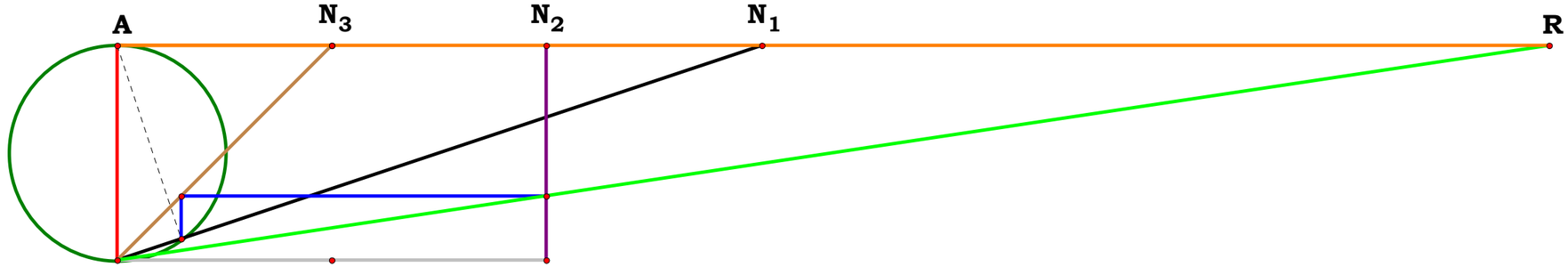
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot \left(X^2 + o^2\right)}{X \cdot o \cdot p \cdot q} = 0$

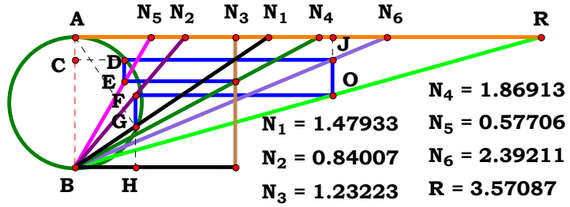


B

$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 6.66667$

$\frac{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3}{N_1} - R = 0.00000$

2SMT4R9



Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{AB}{BN_1}$ $BH := N_1 \cdot \frac{BG}{BN_1}$

$FH := \frac{BH}{N_2}$ $CD := \frac{N_3}{N_4} \cdot N_5$ $AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$

$AJ := N_6 \cdot (AB - AC)$ $R := \frac{AJ}{FH}$ $R = 3.570887$

Definitions.

$$R - \frac{N_2 \cdot N_6 \cdot \left(N_1^2 + 1\right) \cdot \left(\sqrt{N_4^2 - 4 \cdot N_3^2 \cdot N_5^2} + N_4\right)}{2 \cdot N_1 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\left[\sqrt{N_u^2 \cdot \left(C^2 \cdot E^2 - 4 \cdot D^2 \cdot N_u^2\right)} + C \cdot E \cdot N_u\right] \cdot \left(A^2 + N_u^2\right)}{(2 \cdot A \cdot B \cdot C \cdot E \cdot F)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Z \cdot \left(\sqrt{X^2 \cdot m^2 \cdot o^2 - 4 \cdot W^2 \cdot Y^2 \cdot n^2} + X \cdot m \cdot o\right) \cdot \left(U^2 + k^2\right)}{2 \cdot U \cdot X \cdot k \cdot l \cdot p \cdot m \cdot o} = 0$$

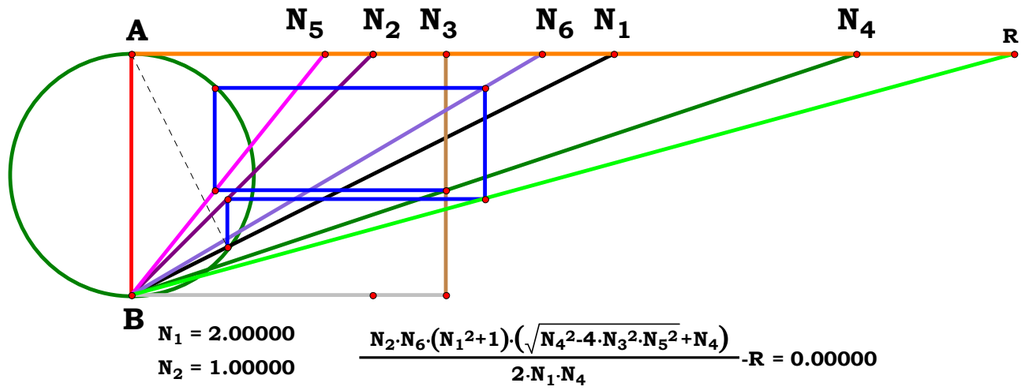
Unit. $AB := 1$ **Given.** $N_1 := 1.47933$ $N_2 := .84007$ $N_3 := 1.23223$

$N_4 := 1.86913$ $N_5 := .57706$ $N_6 := 2.39211$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

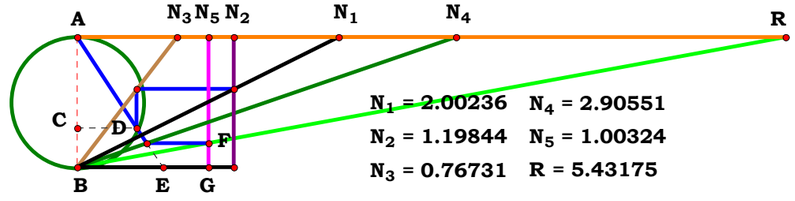
$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 1.30000$
$N_4 = 3.00000$
$N_5 = 0.80000$
$N_6 = 1.70000$
$R = 3.65631$

$$\frac{N_2 \cdot N_6 \cdot \left(N_1^2 + 1\right) \cdot \left(\sqrt{N_4^2 - 4 \cdot N_3^2 \cdot N_5^2} + N_4\right)}{2 \cdot N_1 \cdot N_4} - R = 0.00000$$

2SMT4R10



$N_1 = 2.00236$ $N_4 = 2.90551$
$N_2 = 1.19844$ $N_5 = 1.00324$
$N_3 = 0.76731$ $R = 5.43175$

Unit. $AB := 1$ Given. $N_1 := 2.00236$ $N_2 := 1.19844$ $N_3 := .76731$

$N_4 := 2.90551$ $N_5 := 1.00324$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$CD := N_3 \cdot \frac{N_2}{N_1}$ $BC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$

$BE := \frac{CD}{AB - BC}$ $FG := \frac{BE}{BE + N_4}$

$R := \frac{N_5}{FG}$ $R = 5.431813$

Definitions.

$$R - \frac{N_5 \cdot \left(N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_3\right) + N_4 \cdot N_5 \cdot \sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2}}{2 \cdot N_2 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

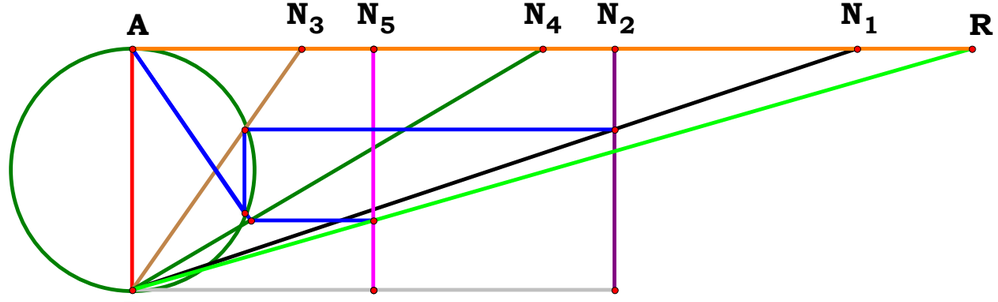
$$R - \frac{\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)}{2 \cdot A \cdot D \cdot E} = 0$$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$

$N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left(Y \cdot \sqrt{V^2 \cdot m^2 \cdot n^2 - 4 \cdot W^2 \cdot X^2 \cdot l^2} + V \cdot Y \cdot m \cdot n + 2 \cdot W \cdot X \cdot l \cdot o\right)}{2 \cdot W \cdot X \cdot l \cdot o \cdot p} = 0$$

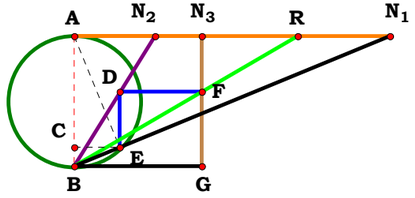


B

$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 1.70000$
$N_5 = 1.00000$
$R = 3.47534$

$$\frac{N_5 \cdot \left(N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_3\right) + N_4 \cdot N_5 \cdot \sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3^2}}{2 \cdot N_2 \cdot N_3} - R = 0.00000$$

2SMT4R11



$N_1 = 2.41885$
$N_2 = 0.61730$
$N_3 = 0.98040$
$R = 1.71409$

Unit. $AB := 1$ **Given.** $N_1 := 2.41885$ $N_2 := .61730$ $N_3 := .98040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{AB}{BN_1}$

$CE := \frac{N_1 \cdot BE}{BN_1}$ $FG := \frac{CE}{N_2}$

$R := \frac{N_3}{FG}$ $R = 1.714092$

Definitions.

$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

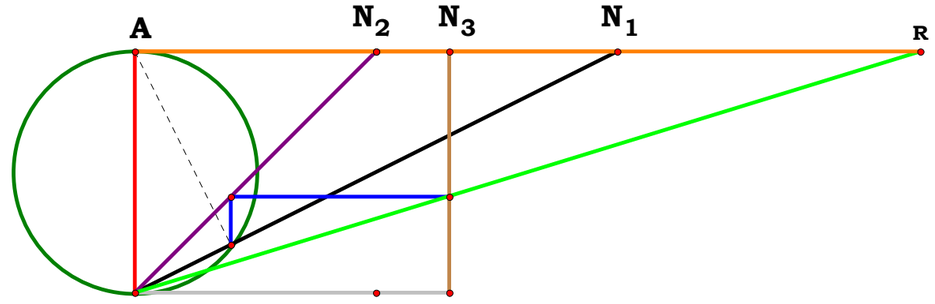
$N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$

$N_3 - \frac{Z}{q} = 0$

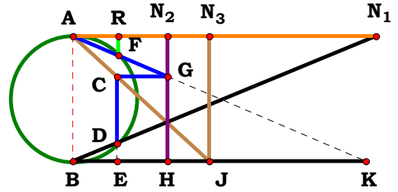
$R - \frac{Y \cdot Z \cdot \left(X^2 + o^2\right)}{X \cdot o \cdot p \cdot q} = 0$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 1.30000$
$R = 3.25000$

$\frac{N_2 \cdot N_3 \cdot (N_1^2+1)}{N_1} - R = 0.00000$

2SMT5R0



$N_1 = 2.42424$
$N_2 = 0.75758$
$N_3 = 1.09091$
$R = 0.36089$

Unit. $AB := 1$ Given. $N_1 := 2.42424$ $N_2 := .75758$ $N_3 := 1.09091$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

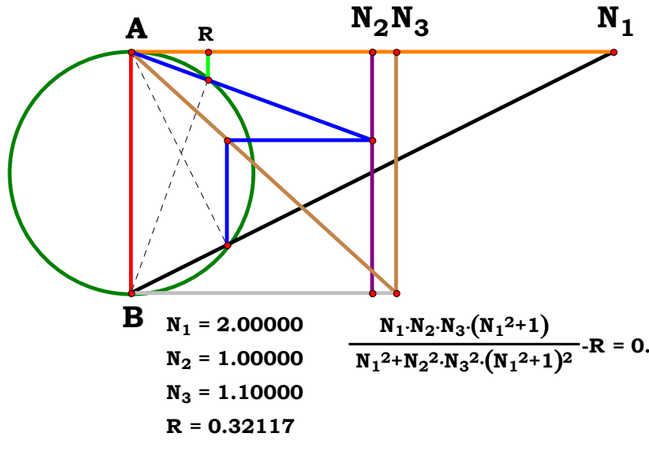
$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $CE := \frac{AB \cdot (N_3 - BE)}{N_3}$

$BK := \frac{N_2 \cdot AB}{AB - CE}$ $AK := \sqrt{BK^2 + AB^2}$

$AF := \frac{AB^2}{AK}$ $R := \frac{BK \cdot AF}{AK}$

$R = 0.360884$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 1.10000$
$R = 0.32117$

$\frac{N_1 \cdot N_2 \cdot N_3 \cdot (N_1^2+1)}{N_1^2+N_2^2 \cdot N_3^2 \cdot (N_1^2+1)^2} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1^2 + N_2^2 \cdot N_3^2 \cdot \left(N_1^2 + 1\right)^2} = 0$$

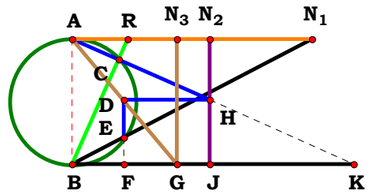
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{A \cdot B \cdot C \cdot N_u \cdot \left(A^2 + N_u^2\right)}{N_u^2 \cdot \left(A^2 + N_u^2\right)^2 + A^2 \cdot B^2 \cdot C^2} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Y \cdot Z \cdot o \cdot p \cdot q \cdot \left(X^2 + o^2\right)}{Z^2 \cdot Y^2 \cdot \left(X^2 + o^2\right)^2 + X^2 \cdot o^2 \cdot p^2 \cdot q^2} = 0$$

2SMT5R1



$N_1 = 1.91919$
$N_2 = 1.10101$
$N_3 = 0.83838$
$R = 0.44395$

Unit. $AB := 1$ Given. $N_1 := 1.91919$ $N_2 := 1.10101$ $N_3 := .83838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BE := \frac{AB^2}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $DF := \frac{AB \cdot (N_3 - BF)}{N_3}$

$BK := \frac{N_2 \cdot AB}{AB - DF}$ $R := \frac{AB^2}{BK}$

$R = 0.443951$

Definitions.

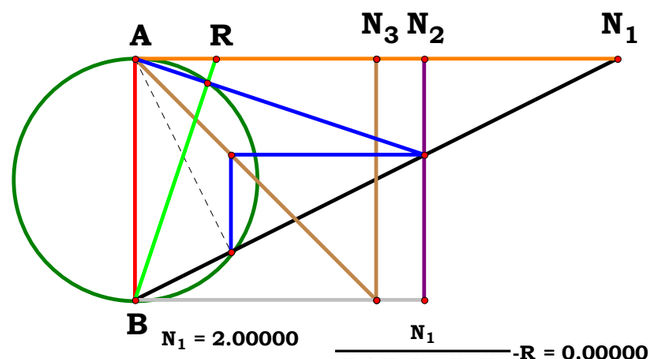
$R - \frac{N_1}{N_2 \cdot N_3 \cdot (N_1^2 + 1)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot B \cdot C}{A^2 \cdot N_u + N_u^3} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

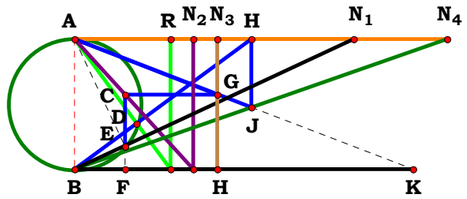
$R - \frac{X \cdot o \cdot p \cdot q}{Y \cdot Z \cdot (X^2 + o^2)} = 0$



$N_1 = 2.00000$
$N_2 = 1.20000$
$N_3 = 1.00000$
$R = 0.33333$

$\frac{N_1}{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3} - R = 0.00000$

2SMT5R2



$N_1 = 2.13797$
$N_2 = 0.90787$
$N_3 = 1.09663$
$N_4 = 2.85708$
$R = 0.73548$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := .90787$ $N_3 := 1.09663$

$N_4 := 2.85708$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{AB}{BN_1}$

$BF := N_1 \cdot \frac{BE}{BN_1}$ $GN_3 := \frac{BF}{N_2}$

$BK := \frac{N_3}{GN_3}$ $AH := \frac{BK \cdot N_4}{BK + N_4}$

$R := \frac{AB^2}{AH}$ $R = 0.735478$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) + N_1 \cdot N_4}{N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1^2 + 1\right)} = 0$$

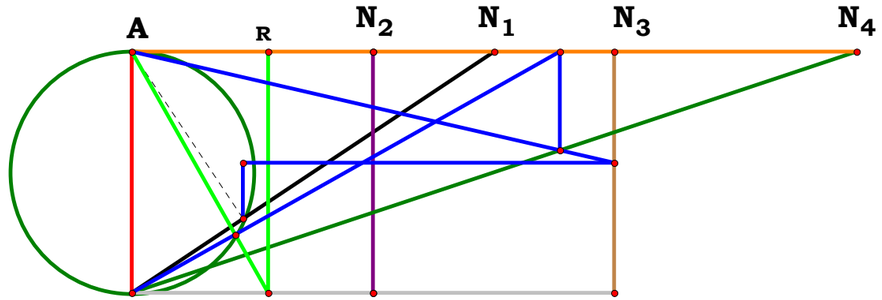
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2}{A^2 \cdot N_u + N_u^3} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot p \cdot \left(W^2 + m^2\right) + Z \cdot n \cdot o \cdot W \cdot m}{X \cdot Y \cdot Z \cdot \left(W^2 + m^2\right)} = 0$$

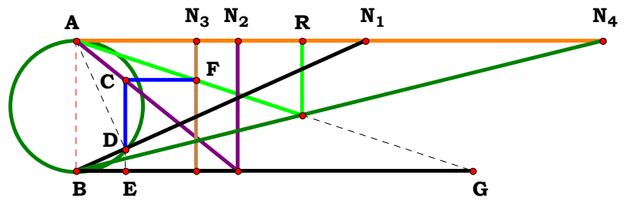


B

$N_1 = 1.50000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 0.56410$

$$\frac{N_2 \cdot N_3 \cdot (N_1^2+1) + N_1 \cdot N_4}{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2+1)} - R = 0.00000$$

2SMT5R3



$N_1 = 2.21545$
$N_2 = 1.23719$
$N_3 = 0.92228$
$N_4 = 4.03874$
$R = 1.73542$

Unit. $AB := 1$ Given. $N_1 := 2.21545$ $N_2 := 1.23719$ $N_3 := .92228$ $N_4 := 4.03874$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{AB}{BN_1}$ $BE := N_1 \cdot \frac{BD}{BN_1}$

$FN_3 := \frac{BE}{N_2}$ $BG := \frac{N_3}{FN_3}$ $R := \frac{BG \cdot N_4}{BG + N_4}$

$R = 1.735415$

Definitions.

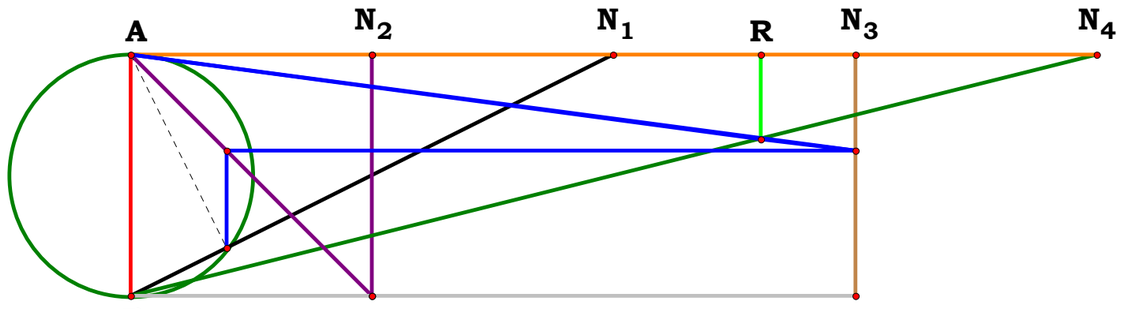
$$R - \frac{N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1^2 + 1\right)}{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) + N_1 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot D + A \cdot B \cdot C + D \cdot N_u^2} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

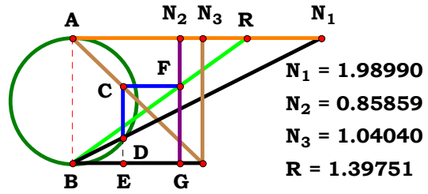
$$R - \frac{X \cdot Y \cdot Z \cdot \left(W^2 + m^2\right)}{X \cdot Y \cdot p \cdot \left(W^2 + m^2\right) + Z \cdot n \cdot o \cdot W \cdot m} = 0$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 2.60870$

$$\frac{N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1^2 + 1\right)}{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) + N_1 \cdot N_4} - R = 0.00000$$

2SMT5R4



$N_1 = 1.98990$
$N_2 = 0.85859$
$N_3 = 1.04040$
$R = 1.39751$

Unit. $AB := 1$ Given. $N_1 := 1.98990$ $N_2 := .85859$ $N_3 := 1.04040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BN_1 := \sqrt{N_1^2 + AB^2} \qquad BD := \frac{AB^2}{BN_1} \qquad BE := \frac{N_1 \cdot BD}{BN_1}$$

$$CE := \frac{AB \cdot (N_3 - BE)}{N_3} \qquad R := \frac{N_2 \cdot AB}{CE} \qquad R = 1.397522$$

Definitions.

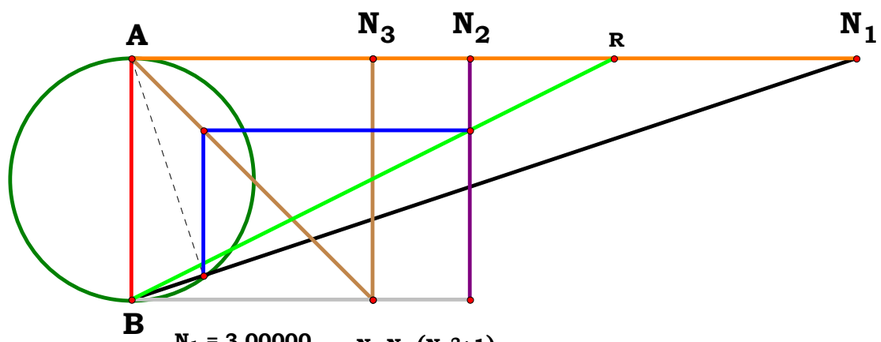
$$R - \frac{N_2 \cdot N_3 \cdot (N_1^2 + 1)}{N_1^2 \cdot N_3 + N_3 - N_1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A^2 + N_u^2)}{B \cdot (A^2 - A \cdot C + N_u^2)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

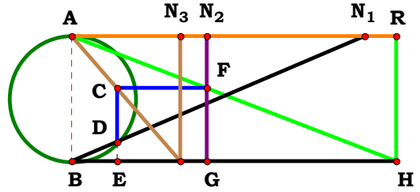
$$R - \frac{Y \cdot Z \cdot (X^2 + o^2)}{Z \cdot p \cdot X^2 - p \cdot q \cdot X \cdot o + Z \cdot p \cdot o^2} = 0$$



$N_1 = 3.00000$
$N_2 = 1.40000$
$N_3 = 1.00000$
$R = 2.00000$

$$\frac{N_2 \cdot N_3 \cdot (N_1^2 + 1)}{(N_1^2 \cdot N_3 + N_3) - N_1} - R = 0.00000$$

2SMT5R5



$N_1 = 2.34343$
$N_2 = 1.08081$
$N_3 = 0.86869$
$R = 2.60086$

Unit. $AB := 1$ **Given.** $N_1 := 2.34343$ $N_2 := 1.08081$ $N_3 := .86869$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

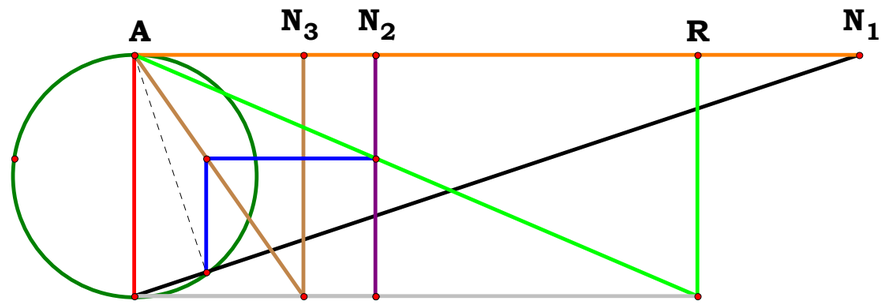
$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $CE := \frac{AB \cdot (N_3 - BE)}{N_3}$

$R := \frac{N_2 \cdot AB}{AB - CE}$ $R = 2.600868$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 0.70000$
$R = 2.33333$

$\frac{N_2 \cdot N_3 \cdot (N_1^2+1)}{N_1}$ -R = 0.00000

Definitions.

$R - \frac{N_2 \cdot N_3 \cdot (N_1^2 + 1)}{N_1} = 0$

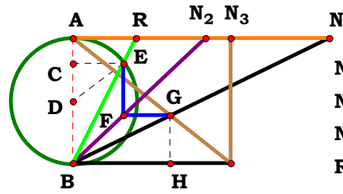
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot (A^2 + N_u^2)}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot (X^2 + o^2)}{X \cdot o \cdot p \cdot q} = 0$

2SMT6R0



$N_1 = 2.05051$
$N_2 = 1.06061$
$N_3 = 1.26263$
$R = 0.50885$

Descriptions.

$$GH := \frac{AB \cdot N_3}{N_3 + N_1} \qquad CE := \frac{N_2 \cdot GH}{AB} \qquad DE := \frac{AB}{2}$$

$$CD := \sqrt{DE^2 - CE^2} \qquad BC := DE + CD \qquad R := \frac{CE \cdot AB}{BC}$$

$R = 0.508856$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot (N_1 + N_3)}{\left[N_1 + N_3 + \sqrt{N_1^2 + N_3 \cdot \left(2 \cdot N_1 - 4 \cdot N_2^2 \cdot N_3 + N_3\right)}\right] \cdot (N_1 + N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot A \cdot N_u^2}{\sqrt{N_u^2 \cdot [B \cdot (A + C) - 2 \cdot A \cdot N_u] \cdot [B \cdot (A + C) + 2 \cdot A \cdot N_u]} + B \cdot N_u \cdot (A + C)} = 0$$

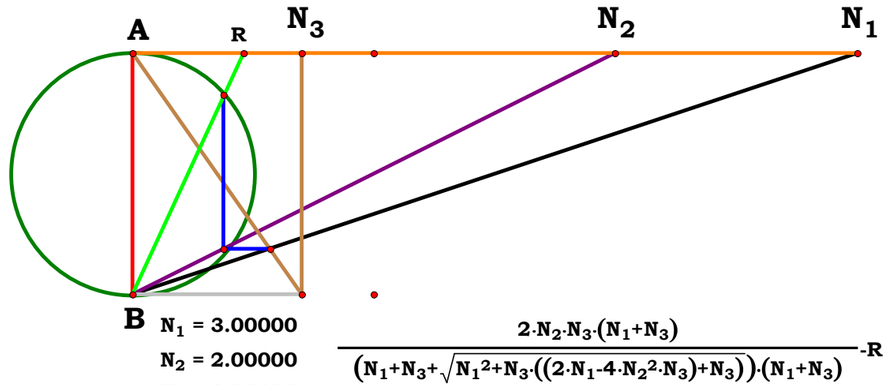
$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Y \cdot Z \cdot o}{\sqrt{Z^2 \cdot o^2 \cdot \left(p^2 - 4 \cdot Y^2\right) + X \cdot p^2 \cdot q \cdot (X \cdot q + 2 \cdot Z \cdot o)} + X \cdot p \cdot q + Z \cdot o \cdot p} = 0$$

Unit. $AB := 1$ **Given.** $N_1 := 2.05051$ $N_2 := 1.06061$ $N_3 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

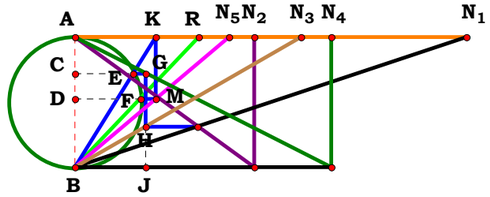
$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$R = 0.45762$

$$\frac{2 \cdot N_2 \cdot N_3 \cdot (N_1 + N_3)}{\left(N_1 + N_3 + \sqrt{N_1^2 + N_3 \cdot \left(\left(2 \cdot N_1 - 4 \cdot N_2^2 \cdot N_3\right) + N_3\right)}\right) \cdot (N_1 + N_3)} - R = 0.00000$$

2SMT6R1



$N_1 = 3.00000$
$N_2 = 1.37279$
$N_3 = 1.73589$
$N_4 = 1.96599$
$N_5 = 1.17758$
$R = 0.94950$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.37279$ $N_3 := 1.73589$

$N_4 := 1.96599$ $N_5 := 1.17758$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

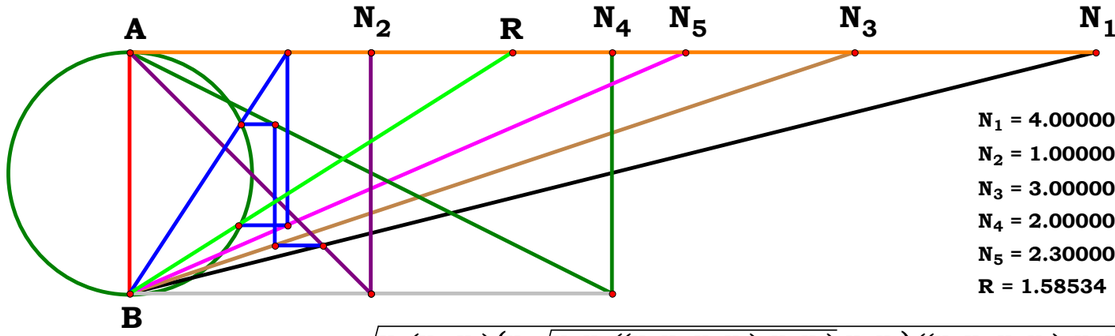
$HJ := \frac{N_2}{N_1 + N_2}$ $BJ := N_3 \cdot HJ$

$BC := AB - \frac{BJ}{N_4}$ $CE := \sqrt{BC \cdot (AB - BC)}$

$AK := \frac{CE}{BC}$ $AD := AB - \frac{AK}{N_5}$

$DF := \sqrt{AD \cdot (AB - AD)}$ $R := \frac{DF}{AB - AD}$

$R = 0.9495$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 2.30000$
$R = 1.58534$

$$\frac{\sqrt{N_4 \cdot (N_1 + N_2) \cdot \left(N_5 \cdot \sqrt{N_2 \cdot N_3 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)} - N_2 \cdot N_3\right) \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}}{\sqrt{N_4 \cdot (N_1 + N_2)} \cdot \sqrt{N_2 \cdot N_3 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4 \cdot (N_1 + N_2)} \cdot \left[N_5 \cdot \sqrt{N_2 \cdot N_3 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)} - N_2 \cdot N_3\right] \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)}{\sqrt{N_4 \cdot (N_1 + N_2)} \cdot \sqrt{N_2 \cdot N_3 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)}} = 0$$

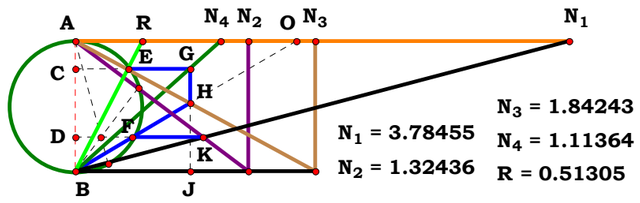
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A \cdot D)^{\frac{1}{4}} \cdot \sqrt{(A + B) \cdot \left[N_u \cdot \sqrt{A \cdot (C - D) + B \cdot C} - E \cdot \sqrt{A \cdot D}\right]} \cdot [A \cdot (C - D) + B \cdot C] \cdot \sqrt{A \cdot B \cdot D}}{A \cdot D \cdot \sqrt{B \cdot E} \cdot \sqrt{A + B} \cdot \sqrt{A \cdot (C - D) + B \cdot C}} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{l \cdot o} \cdot \sqrt{l \cdot m \cdot o} \cdot \sqrt{Y \cdot \left[Z \cdot \sqrt{W \cdot X \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)} - W \cdot X \cdot p \cdot \sqrt{l \cdot o}\right] \cdot (V \cdot m + W \cdot l) \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)}}{l \cdot o \cdot \sqrt{V \cdot Y \cdot m + W \cdot Y \cdot l} \cdot \sqrt{m \cdot p \cdot \sqrt{l \cdot o}} \cdot \sqrt{W \cdot X \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)}} = 0$$

2SMT6R2



Unit. $AB := 1$ Given. $N_1 := 3.78455$ $N_2 := 1.32436$ $N_3 := 1.84243$ $N_4 := 1.11364$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

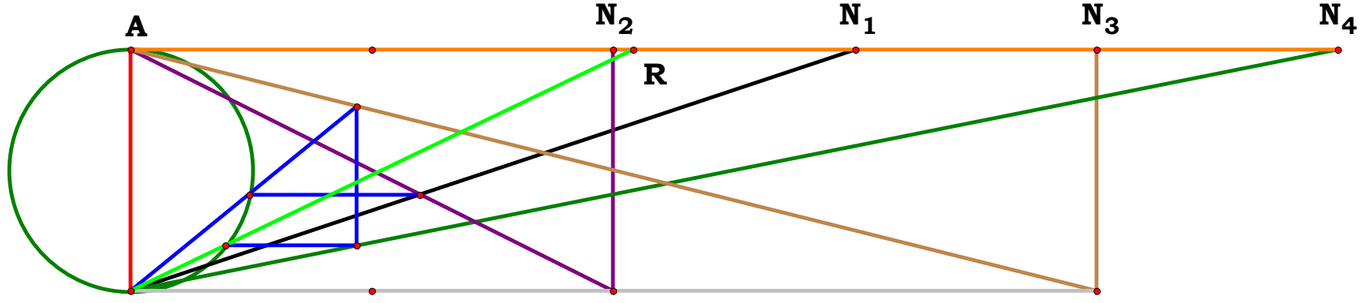
Descriptions.

$BD := \frac{N_2}{N_1 + N_2}$ $DF := \sqrt{BD \cdot (AB - BD)}$

$AO := \frac{DF}{BD}$ $BJ := \frac{AO \cdot N_3}{AO + N_3}$

$BC := \frac{BJ}{N_4}$ $CE := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CE}{BC}$ $R = 0.513051$



Definitions.

$$R - \frac{\sqrt{N_2} \cdot \sqrt{{N_3}^2 \cdot N_4 \cdot \sqrt{N_1 \cdot N_2} - N_1 \cdot N_3 \cdot (N_3 - N_4)}}{N_3 \cdot \sqrt{N_1 \cdot N_2}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)}}{\sqrt{B} \cdot \sqrt{A \cdot D}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

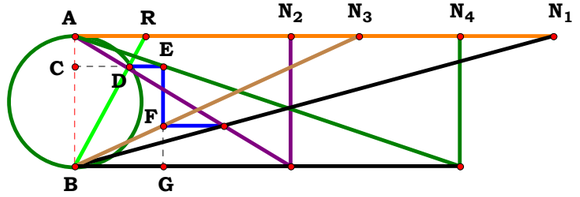
$$R - \frac{\sqrt{X} \cdot \sqrt{Y \cdot \left(Y \cdot Z \cdot m \cdot \sqrt{W \cdot X} - W \cdot Y \cdot p \cdot \sqrt{m \cdot n} + W \cdot Z \cdot o \cdot \sqrt{m \cdot n}\right)} \cdot \sqrt{m \cdot n}}{Y \cdot \sqrt{n} \cdot \sqrt{W \cdot X} \cdot \sqrt{m \cdot p \cdot \sqrt{m \cdot n}}} = 0$$

B

$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 2.08146$

$$\frac{\sqrt{N_2} \cdot \sqrt{\left({N_3}^2 \cdot N_4 \cdot \sqrt{N_1 \cdot N_2} - N_1 \cdot {N_3}^2\right) + N_1 \cdot N_3 \cdot N_4}}{N_3 \cdot \sqrt{N_1 \cdot N_2}} - R = 0.00000$$

2SMT6R3



$N_1 = 3.66832$
$N_2 = 1.65368$
$N_3 = 2.18144$
$N_4 = 2.95394$
$R = 0.54571$

Unit. $AB := 1$ **Given.** $N_1 := 3.66832$ $N_2 := 1.65368$ $N_3 := 2.18144$ $N_4 := 2.95394$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

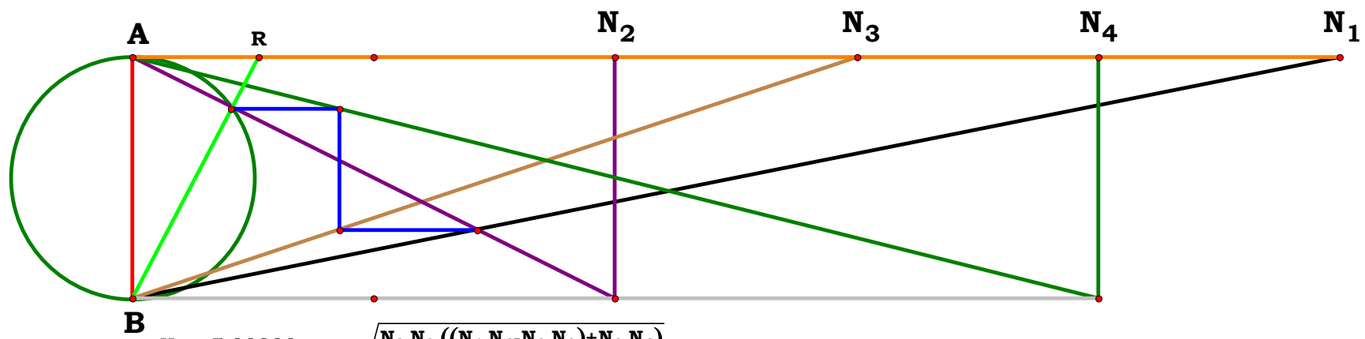
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$FG := \frac{N_2}{N_1 + N_2}$ $BG := N_3 \cdot FG$

$BC := AB - \frac{BG}{N_4}$ $CD := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CD}{BC}$ $R = 0.545712$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 0.52223$

$\frac{\sqrt{N_2 \cdot N_3 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}}{(N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4} - R = 0.00000$

Definitions.

$R - \frac{\sqrt{N_2 \cdot N_3 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)}}{N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4} = 0$

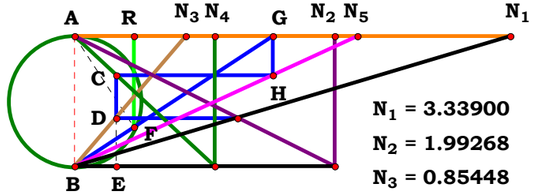
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{A \cdot D}{\sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{m \cdot p \cdot \sqrt{X \cdot Y \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)}}{\sqrt{m \cdot p} \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$

2SMT6R4



$N_1 = 3.33900$ $N_4 = 1.07489$
$N_2 = 1.99268$ $N_5 = 2.16553$
$N_3 = 0.85448$ $R = 0.45890$

Unit. $AB := 1$ Given. $N_1 := 3.33900$ $N_2 := 1.99268$ $N_3 := .85448$

$N_4 := 1.07489$ $N_5 := 2.16553$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

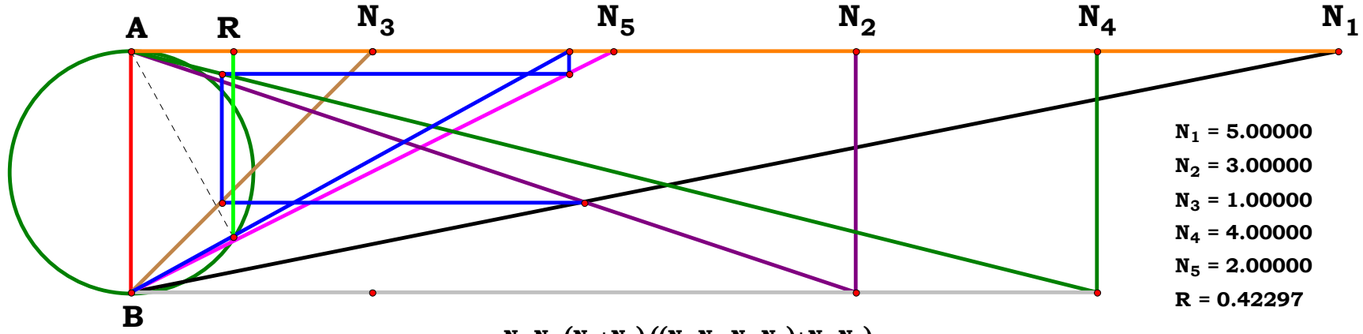
Descriptions.

$DE := \frac{N_2}{N_1 + N_2}$ $BE := N_3 \cdot DE$

$GH := \frac{BE}{N_4}$ $AG := N_5 \cdot (AB - GH)$

$BG := \sqrt{AB^2 + AG^2}$ $BF := \frac{AB}{BG}$

$R := \frac{AG \cdot BF}{BG}$ $R = 0.458903$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$N_5 = 2.00000$
$R = 0.42297$

$$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}{N_4^2 \cdot (N_1 + N_2)^2 + (N_2 \cdot N_3 \cdot N_5)^2 + N_4 \cdot N_5^2 \cdot (N_1 + N_2) \cdot ((N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) + N_2 \cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)}{N_4^2 \cdot (N_1 + N_2)^2 + (N_2 \cdot N_3 \cdot N_5)^2 + N_4 \cdot N_5^2 \cdot (N_1 + N_2) \cdot (N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3 + N_2 \cdot N_4)} = 0$$

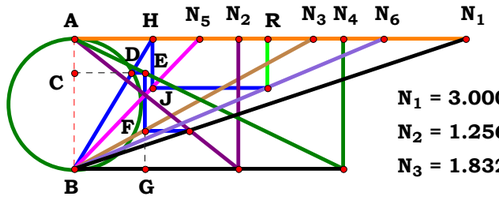
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{C \cdot E \cdot N_u \cdot (A + B) \cdot (A \cdot C - A \cdot D + B \cdot C)}{C^2 \cdot (E^2 + N_u^2) \cdot (A + B)^2 - 2 \cdot A \cdot C \cdot D \cdot N_u^2 \cdot (A + B) + A^2 \cdot D^2 \cdot N_u^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot n \cdot p \cdot (V \cdot m + W \cdot l) \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)}{Z^2 \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)^2 + Y^2 \cdot n^2 \cdot p^2 \cdot (V \cdot m + W \cdot l)^2} = 0$$

2SMT6R5



$N_1 = 3.00000$
$N_2 = 1.25656$
$N_3 = 1.83275$
$N_4 = 2.06284$
$N_5 = 0.95481$
$N_6 = 2.37274$
$R = 1.48172$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.25656$ $N_3 := 1.83275$

$N_4 := 2.06284$ $N_5 := .95481$ $N_6 := 2.37274$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

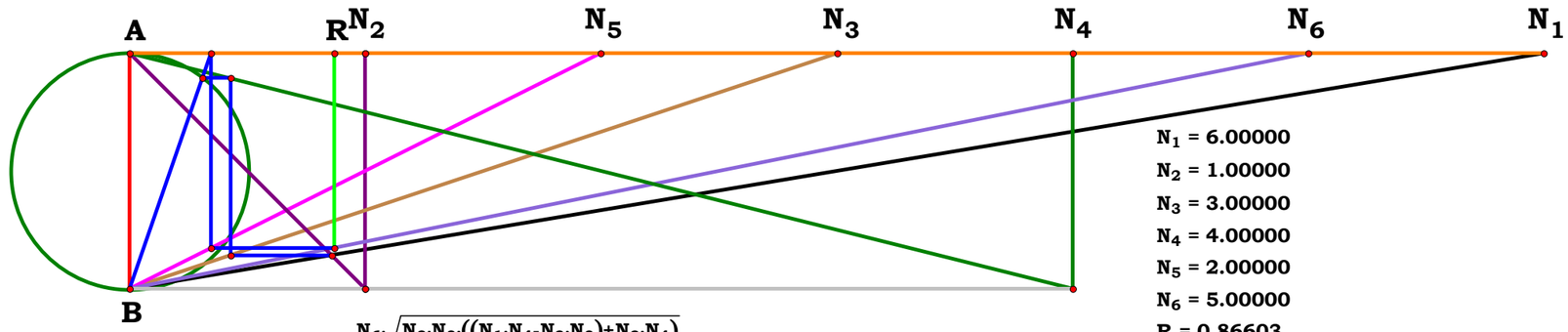
Descriptions.

$FG := \frac{N_2}{N_1 + N_2}$ $BG := N_3 \cdot FG$

$AC := \frac{BG}{N_4}$ $CD := \sqrt{AC \cdot (AB - AC)}$

$AH := \frac{CD}{AB - AC}$ $HJ := AB - \frac{AH}{N_5}$

$R := N_6 \cdot (AB - HJ)$ $R = 1.481726$



$N_1 = 6.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 2.00000$
$N_6 = 5.00000$
$R = 0.86603$

$\frac{N_6 \cdot \sqrt{N_2 \cdot N_3 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}}{N_5 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \sqrt{N_2 \cdot N_3 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)}}{N_5 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

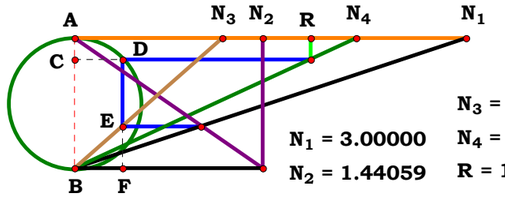
$$N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{A \cdot D \cdot E}{F \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot k \cdot n \cdot o \cdot \sqrt{V \cdot W \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}}{p \cdot \sqrt{k \cdot n} \cdot Y \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} = 0$$

2SMT6R6



$N_1 = 3.00000$ $N_3 = 1.13537$
$N_2 = 1.44059$ $N_4 = 2.15970$
$R = 1.81011$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.44059$ $N_3 := 1.13537$ $N_4 := 2.15970$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

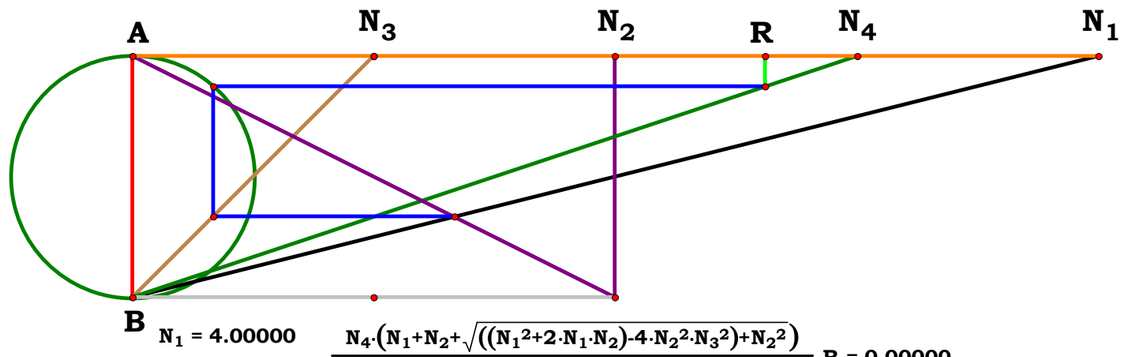
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$EF := \frac{N_2}{N_1 + N_2} \qquad CD := N_3 \cdot EF$$

$$AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$$

$$R := N_4 \cdot (AB - AC) \qquad R = 1.810113$$



$N_1 = 4.00000$ $N_3 = 1.00000$
$N_2 = 2.00000$ $N_4 = 3.00000$
$\frac{N_4 \cdot \left(N_1 + N_2 + \sqrt{((N_1^2 + 2 \cdot N_1 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3^2) + N_2^2}\right)}{2 \cdot (N_1 + N_2)} - R = 0.00000$
$R = 2.61803$

Definitions.

$$R - \frac{N_4 \cdot \left(N_1 + N_2 + \sqrt{N_1^2 + 2 \cdot N_1 \cdot N_2 - 4 \cdot N_2^2 \cdot N_3^2 + N_2^2}\right)}{2 \cdot (N_1 + N_2)} = 0$$

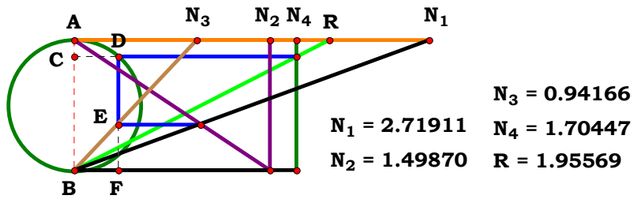
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot \left[\sqrt{\left[C \cdot (A + B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A + B) + 2 \cdot A \cdot N_u\right]} + C \cdot (A + B)\right]}{2 \cdot D \cdot (A + B) \cdot C} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left(\sqrt{W^2 \cdot n^2 \cdot o^2 + 2 \cdot W \cdot X \cdot m \cdot n \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 + X^2 \cdot m^2 \cdot o^2} + W \cdot n \cdot o + X \cdot m \cdot o\right)}{2 \cdot p \cdot (W \cdot n + X \cdot m) \cdot o} = 0$$

2SMT6R7



$N_3 = 0.94166$
$N_1 = 2.71911$ $N_4 = 1.70447$
$N_2 = 1.49870$ $R = 1.95569$

Unit. $AB := 1$ **Given.** $N_1 := 2.71911$ $N_2 := 1.49870$ $N_3 := .94166$

$N_4 := 1.70447$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$EF := \frac{N_2}{N_1 + N_2}$ $CD := EF \cdot N_3$

$AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$

$R := \frac{N_4}{AB - AC}$ $R = 1.95569$

Definitions.

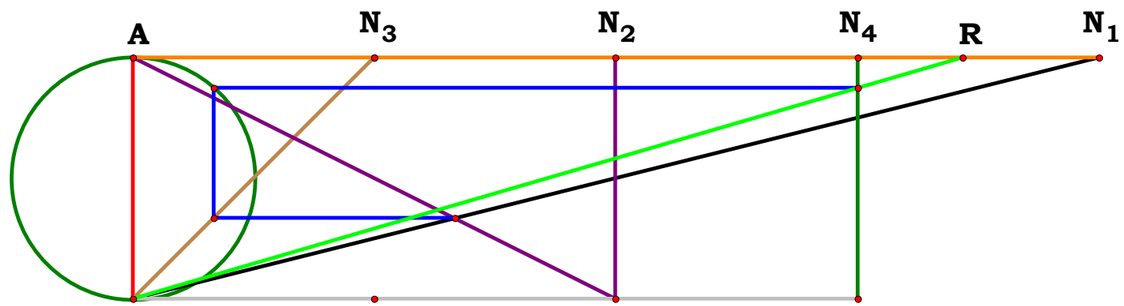
$$R - \frac{2 \cdot N_4 \cdot (N_1 + N_2)}{N_1 + N_2 + \sqrt{N_1^2 + 2 \cdot N_1 \cdot N_2 - 4 \cdot N_2^2 \cdot N_3^2 + N_2^2}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u \cdot (A + B) \cdot C}{D \cdot \left[C \cdot (A + B) + \sqrt{\left[\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u\right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u\right)\right]}\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

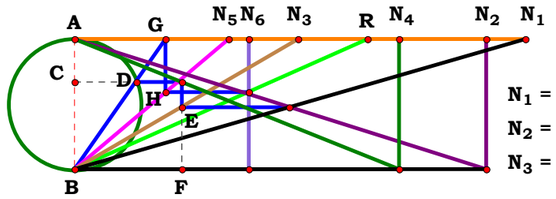
$$R - \frac{2 \cdot Z \cdot (W \cdot n + X \cdot m) \cdot o}{p \cdot \left(\sqrt{W^2 \cdot n^2 \cdot o^2 + 2 \cdot W \cdot X \cdot m \cdot n \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 + X^2 \cdot m^2 \cdot o^2} + W \cdot n \cdot o + X \cdot m \cdot o\right)} = 0$$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$R = 3.43769$

$$\frac{2 \cdot N_4 \cdot (N_1 + N_2)}{N_1 + N_2 + \sqrt{((N_1^2 + 2 \cdot N_1 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3^2) + N_2^2}} - R = 0.00000$$

2SMT6R8



$N_1 = 3.45523$
$N_2 = 3.15497$
$N_3 = 1.71652$
$N_4 = 2.48902$
$N_5 = 1.17758$
$N_6 = 1.33636$
$R = 2.24660$

Unit. $AB := 1$ **Given.** $N_1 := 3.45523$ $N_2 := 3.15497$ $N_3 := 1.71652$ $N_4 := 2.48902$ $N_5 := 1.17758$ $N_6 := 1.33636$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$EF := \frac{N_2}{N_1 + N_2}$ $BF := N_3 \cdot EF$ $AC := \frac{BF}{N_4}$

$CD := \sqrt{AC \cdot (AB - AC)}$ $AG := \frac{CD}{AB - AC}$ $GH := AB - \frac{AG}{N_5}$

$R := \frac{N_6}{AB - GH}$ $R = 2.246592$

Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4\right)}{\sqrt{N_2 \cdot N_3 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3 + N_2 \cdot N_4\right)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

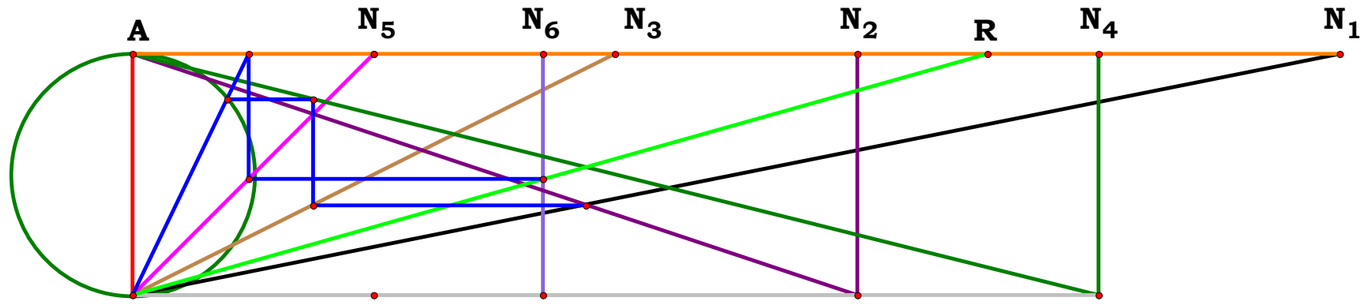
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot (C - D) + B \cdot C}}{A \cdot D \cdot E \cdot F} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

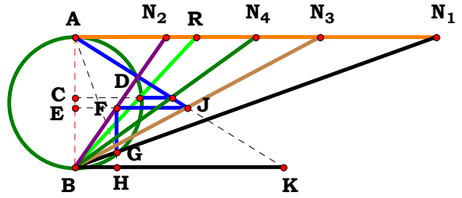
$$R - \frac{Y \cdot Z \cdot \sqrt{k \cdot n} \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{k \cdot n \cdot o \cdot p \cdot \sqrt{V \cdot W \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}} = 0$$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$N_5 = 1.00000$
$N_6 = 1.70000$
$R = 3.53883$

$$\frac{N_5 \cdot N_6 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}{\sqrt{N_2 \cdot N_3 \cdot ((N_1 \cdot N_4 - N_2 \cdot N_3) + N_2 \cdot N_4)}} - R = 0.00000$$

2SMT6R9



$N_1 = 2.76754$
$N_2 = 0.69478$
$N_3 = 1.88118$
$N_4 = 1.38484$
$R = 0.92960$

Unit. $AB := 1$ **Given.** $N_1 := 2.76754$ $N_2 := .69478$ $N_3 := 1.88118$ $N_4 := 1.38484$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

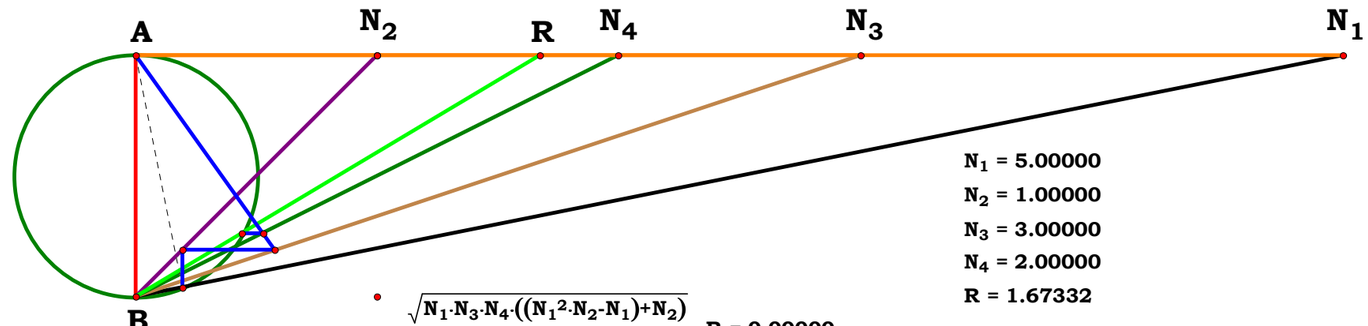
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{AB}{BN_1}$

$BH := \frac{N_1 \cdot BG}{BN_1}$ $FH := \frac{BH}{N_2}$

$EJ := N_3 \cdot FH$ $BK := \frac{EJ}{AB - FH}$

$BC := \frac{BK}{BK + N_4}$ $CD := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CD}{BC}$ $R = 0.9296$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = 1.67332$

$\frac{\sqrt{N_1 \cdot N_3 \cdot N_4 \cdot ((N_1^2 \cdot N_2 - N_1) + N_2)}}{N_1 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{\sqrt{N_1 \cdot N_3 \cdot N_4 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)}}{N_1 \cdot N_3} = 0$

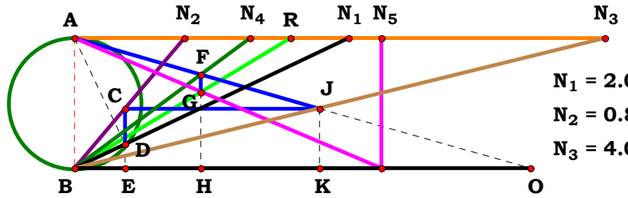
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{C \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{A \cdot B \cdot C \cdot D}} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{o \cdot \sqrt{W \cdot Y \cdot Z \cdot \left[\left(W^2 + m^2\right) \cdot X - W \cdot m \cdot n\right]}}{W \cdot Y \cdot \sqrt{m \cdot n \cdot o \cdot p}} = 0$

2SMT6R10



$N_1 = 2.09922$ $N_4 = 1.34610$
$N_2 = 0.84007$ $N_5 = 2.34956$
$N_3 = 4.07016$ $R = 1.65787$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := .84007$ $N_3 := 4.07016$

$N_4 := 1.34610$ $N_5 := 2.34956$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

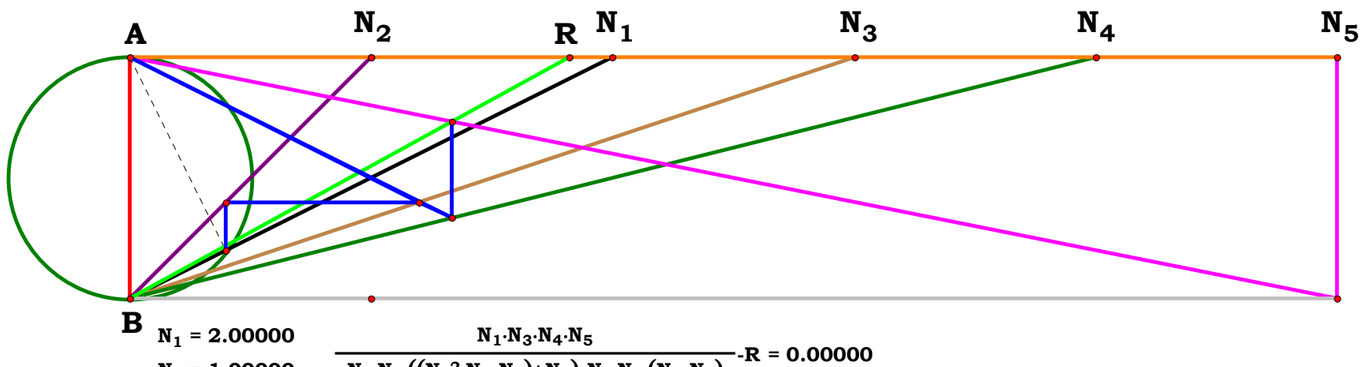
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{AB}{BN_1}$

$BE := N_1 \cdot \frac{BD}{BN_1}$ $CE := \frac{BE}{N_2}$

$BK := CE \cdot N_3$ $BO := \frac{BK}{AB - CE}$

$BH := \frac{N_4 \cdot BO}{BO + N_4}$ $GH := AB - \frac{BH}{N_5}$

$R := \frac{BH}{GH}$ $R = 1.657883$



$N_1 = 2.00000$ $\frac{N_1 \cdot N_3 \cdot N_4 \cdot N_5}{N_4 \cdot N_5 \cdot ((N_1^2 \cdot N_2 - N_1) + N_2) - N_1 \cdot N_3 \cdot (N_4 - N_5)} - R = 0.00000$

$N_2 = 1.00000$

$N_3 = 3.00000$

$N_4 = 4.00000$

$N_5 = 5.00000$

$R = 1.81818$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot N_4 \cdot N_5}{N_4 \cdot N_5 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right) - N_1 \cdot N_3 \cdot \left(N_4 - N_5\right)} = 0$$

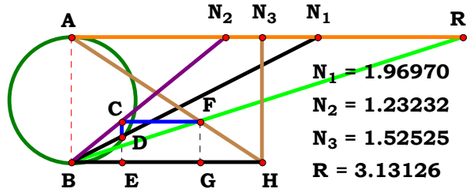
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot B \cdot N_u}{C \cdot \left(A^2 + N_u^2\right) - A \cdot B \cdot (C - D + E)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot l \cdot m}{W \cdot Y \cdot Z \cdot n \cdot \left(V^2 + l^2\right) - V \cdot l \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n)} = 0$$

2SMT6R11



Unit. $AB := 1$ Given. $N_1 := 1.96970$ $N_2 := 1.23232$ $N_3 := 1.52525$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $CE := \frac{AB \cdot BE}{N_2}$

$GH := \frac{N_3 \cdot CE}{AB}$ $BG := N_3 - GH$

$R := \frac{BG \cdot AB}{CE}$ $R = 3.131245$

Definitions.

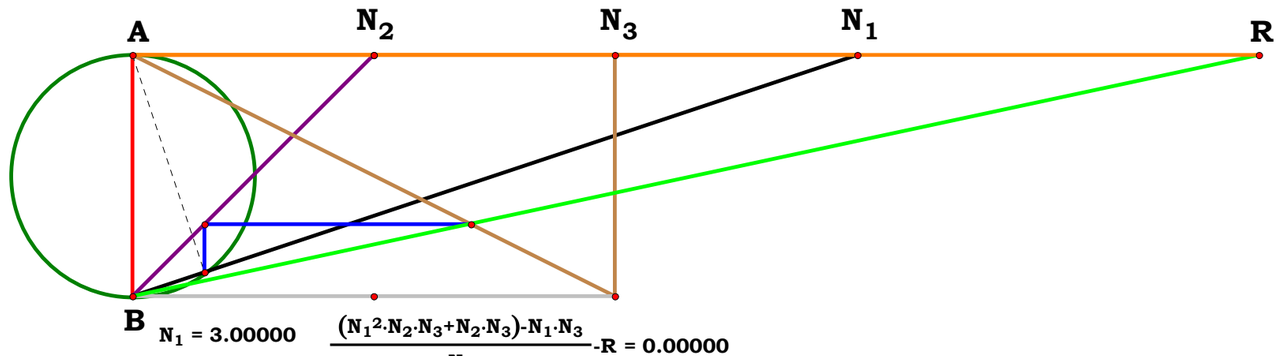
$R - \frac{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3 - N_1 \cdot N_3}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot X^2 - Z \cdot p \cdot X \cdot o + Y \cdot Z \cdot o^2}{X \cdot o \cdot p \cdot q} = 0$



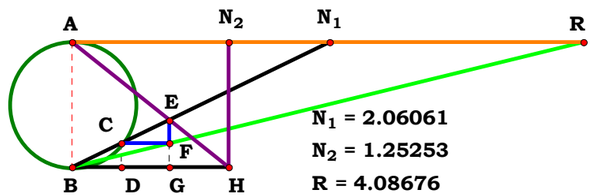
$N_1 = 3.00000$ $\frac{(N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_3}{N_1} - R = 0.00000$

$N_2 = 1.00000$

$N_3 = 2.00000$

$R = 4.66667$

2SMT6R12



Unit. $AB := 1$ Given. $N_1 := 2.06061$ $N_2 := 1.25253$

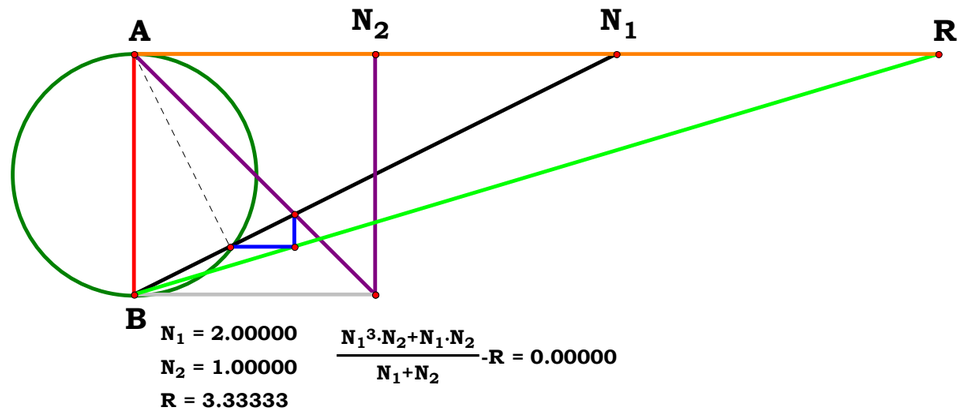
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BG := \frac{N_1 \cdot N_2}{N_1 + N_2}$ $BN_1 := \sqrt{N_1^2 + AB^2}$

$BC := \frac{AB^2}{BN_1}$ $CD := \frac{AB \cdot BC}{BN_1}$

$R := \frac{BG \cdot AB}{CD}$ $R = 4.086785$



Definitions.

$R - \frac{N_1^3 \cdot N_2 + N_1 \cdot N_2}{N_1 + N_2} = 0$

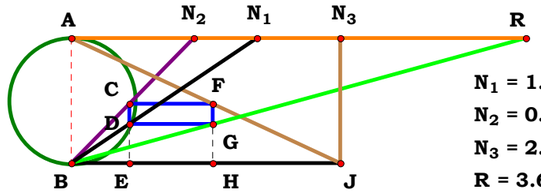
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot (A + B)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot \left(Y^2 + p^2\right)}{p^2 \cdot (Y \cdot q + Z \cdot p)} = 0$

2SMT6R13



$N_1 = 1.48485$
$N_2 = 0.97980$
$N_3 = 2.15152$
$R = 3.63458$

Unit. $AB := 1$ Given. $N_1 := 1.48485$ $N_2 := .97980$ $N_3 := 2.15152$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BD := \frac{AB^2}{BN_1}$ $BE := \frac{N_1 \cdot BD}{BN_1}$

$CE := \frac{AB \cdot BE}{N_2}$ $HJ := \frac{N_3 \cdot CE}{AB}$ $BH := N_3 - HJ$

$DE := \frac{AB \cdot BE}{N_1}$ $R := \frac{BH \cdot AB}{DE}$ $R = 3.6346$

Definitions.

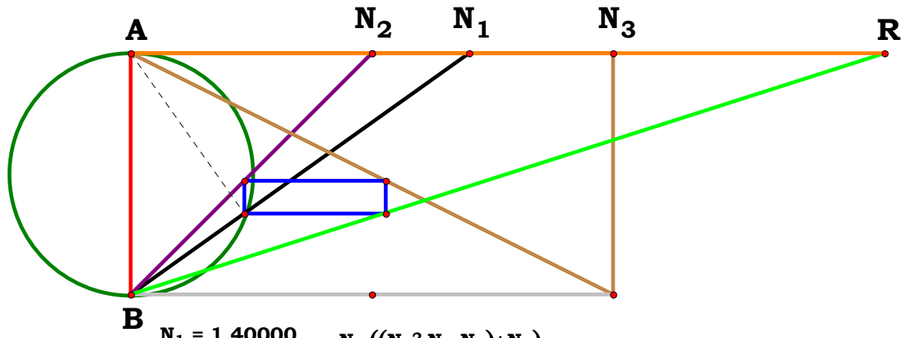
$$R - \frac{N_3 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)}{N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{A^2 \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

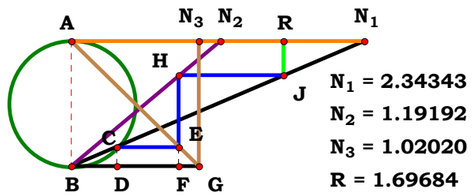
$$R - \frac{Z \cdot \left(Y \cdot X^2 - p \cdot X \cdot o + Y \cdot o^2\right)}{Y \cdot o^2 \cdot q} = 0$$



$N_1 = 1.40000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$R = 3.12000$

$\frac{N_3 \cdot ((N_1^2 \cdot N_2 - N_1) + N_2)}{N_2} - R = 0.00000$

2SMT6R14



Unit. $AB := 1$ Given. $N_1 := 2.34343$ $N_2 := 1.19192$ $N_3 := 1.02020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

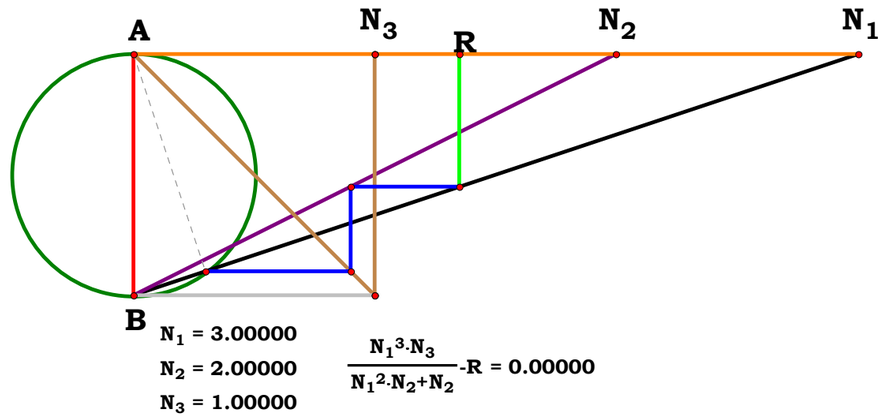
Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BC := \frac{AB^2}{BN_1}$

$CD := \frac{AB \cdot BC}{BN_1}$ $FG := \frac{N_3 \cdot CD}{AB}$

$BF := N_3 - FG$ $HF := \frac{AB \cdot BF}{N_2}$

$R := \frac{N_1 \cdot HF}{AB}$ $R = 1.696829$



Definitions.

$$R - \frac{N_1^3 \cdot N_3}{N_1^2 \cdot N_2 + N_2} = 0$$

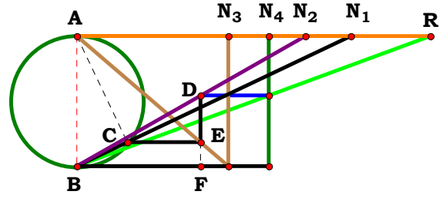
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{B \cdot N_u^3}{A \cdot C \cdot \left(A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X^3 \cdot Z \cdot p}{Y \cdot o \cdot q \cdot \left(X^2 + o^2\right)} = 0$$

2SMT6R15



$N_1 = 2.09922$
$N_2 = 1.75053$
$N_3 = 1.16443$
$N_4 = 1.47201$
$R = 2.71510$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.75053$ $N_3 := 1.16443$ $N_4 := 1.47201$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BC := \frac{AB^2}{BN_1}$

$EF := AB \cdot \frac{BC}{BN_1}$ $BF := N_3 \cdot (AB - EF)$

$DF := \frac{BF}{N_2}$ $R := \frac{N_4}{DF}$ $R = 2.715097$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot \left(N_1^2 + 1\right)}{N_1^2 \cdot N_3} = 0$$

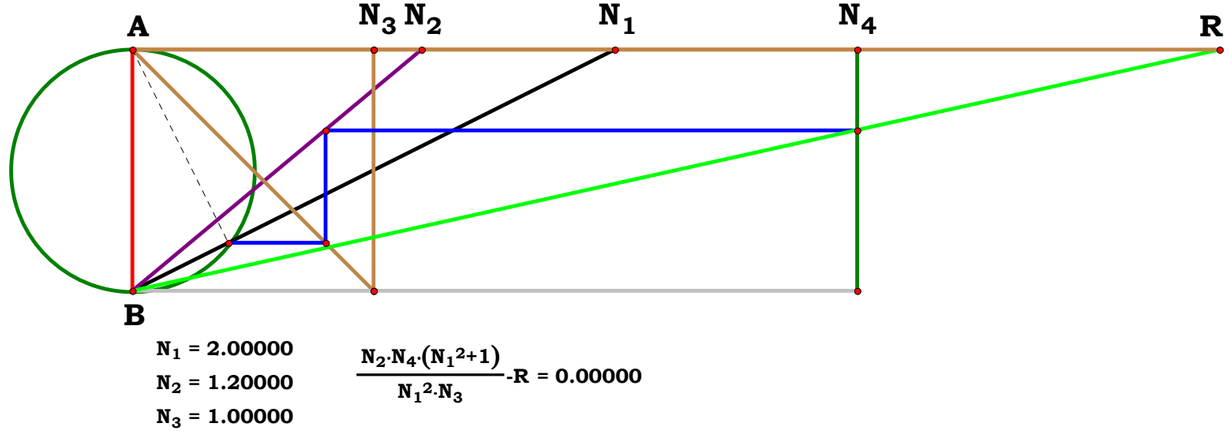
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{C \cdot \left(A^2 + N_u^2\right)}{B \cdot D \cdot N_u} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

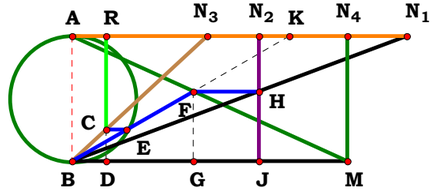
$$R - \frac{X \cdot Z \cdot o \cdot \left(W^2 + m^2\right)}{W^2 \cdot Y \cdot n \cdot p} = 0$$



$N_1 = 2.00000$
$N_2 = 1.20000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$R = 4.50000$

$\frac{N_2 \cdot N_4 \cdot (N_1^2+1)}{N_1^2 \cdot N_3} - R = 0.00000$

2SMT7R0



$N_1 = 2.67677$
$N_2 = 1.49495$
$N_3 = 1.08081$
$N_4 = 2.20202$
$R = 0.26817$

Unit. $AB := 1$ Given. $N_1 := 2.67677$ $N_2 := 1.49495$ $N_3 := 1.08081$ $N_4 := 2.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

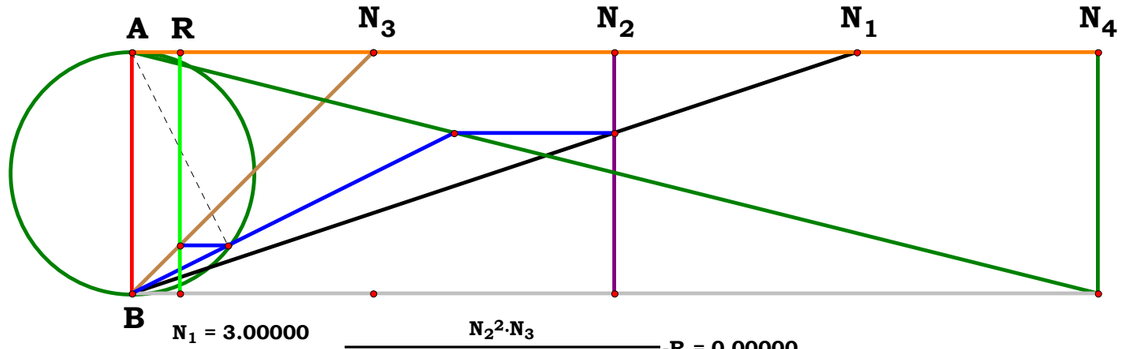
$HJ := \frac{N_2}{N_1}$ $GM := \frac{N_4 \cdot HJ}{AB}$

$BG := N_4 - GM$ $AK := \frac{BG \cdot AB}{HJ}$

$BK := \sqrt{AK^2 + AB^2}$ $BE := \frac{AB^2}{BK}$

$CD := \frac{AB \cdot BE}{BK}$ $R := \frac{N_3 \cdot CD}{AB}$

$R = 0.268168$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$R = 0.20000$

$\frac{N_2^2 \cdot N_3}{N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_4^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_3}{N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_4^2 + 1)} = 0$$

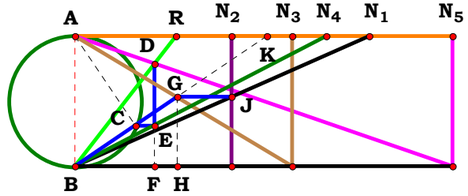
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 \cdot D^2 \cdot N_u}{A^2 \cdot C \cdot D^2 + C \cdot N_u^2 \cdot (A - B)^2} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot m^2 \cdot p^2}{Z^2 \cdot o \cdot (W \cdot n - X \cdot m)^2 + X^2 \cdot m^2 \cdot o \cdot p^2} = 0$$

2SMT7R1



$N_1 = 2.25419$
$N_2 = 1.19844$
$N_3 = 1.66809$
$N_4 = 1.92724$
$N_5 = 2.89197$
$R = 0.77308$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.19844$ $N_3 := 1.66809$

$N_4 := 1.92724$ $N_5 := 2.89197$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

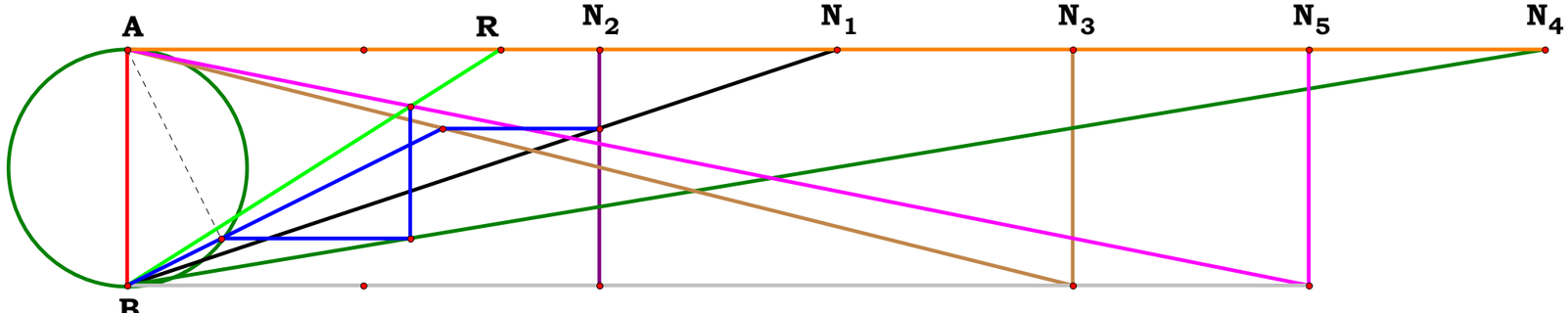
$JN_2 := AB - \frac{N_2}{N_1}$ $BH := N_3 \cdot JN_2$

$AK := \frac{BH}{AB - JN_2}$ $BK := \sqrt{AB^2 + AK^2}$

$BC := \frac{AB^2}{BK}$ $EF := \frac{BC}{BK}$

$BF := N_4 \cdot EF$ $DF := AB - \frac{BF}{N_5}$

$R := \frac{BF}{DF}$ $R = 0.773071$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 6.00000$
$N_5 = 5.00000$
$R = 1.57895$

$\frac{N_2^2 \cdot N_4 \cdot N_5}{N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_4 \cdot N_5}{N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)} = 0$$

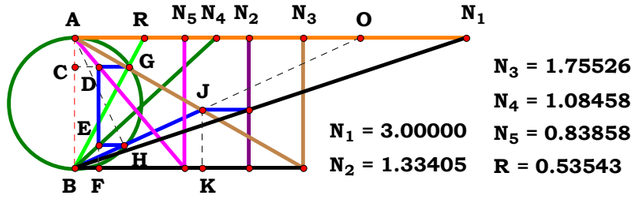
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A^2 \cdot C^2 \cdot N_u}{N_u^2 \cdot D \cdot (A - B)^2 + A^2 \cdot C^2 \cdot (D - E)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot Y \cdot Z \cdot l^2 \cdot n^2}{W^2 \cdot l^2 \cdot (X^2 \cdot Z \cdot o - Y \cdot n^2 \cdot p + Z \cdot n^2 \cdot o) + V \cdot X^2 \cdot Z \cdot m \cdot o \cdot (V \cdot m - 2 \cdot W \cdot l)} = 0$$

2SMT7R2



Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.33405$ $N_3 := 1.75526$

$N_4 := 1.08458$ $N_5 := .83858$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$JK := \frac{N_2}{N_1}$ $BK := N_3 \cdot (AB - JK)$ $AO := \frac{BK}{JK}$

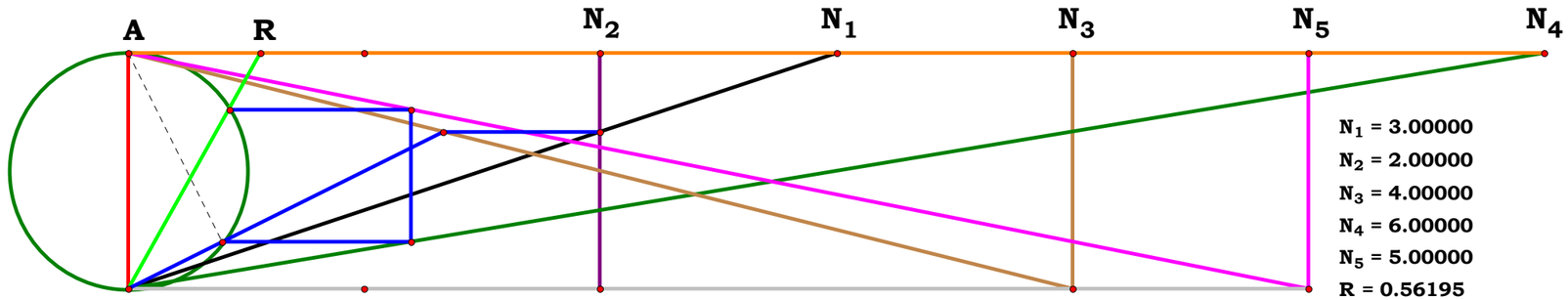
$BO := \sqrt{AB^2 + AO^2}$ $BH := \frac{AB^2}{BO}$ $EF := \frac{BH}{BO}$

$BF := EF \cdot N_4$ $AC := \frac{BF}{N_5}$

$CG := \sqrt{AC \cdot (AB - AC)}$ $R := \frac{CG}{AB - AC}$

$R = 0.535436$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$



Definitions.

$$\frac{N_2 \cdot \sqrt{N_4 \cdot N_5^2 \cdot \left[N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)\right]}}{N_5 \cdot \left[N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)\right]} - R = 0.00000$$

$$R - \frac{N_2 \cdot \sqrt{N_4 \cdot N_5^2 \cdot \left[N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)\right]}}{N_5 \cdot \left[N_3^2 \cdot N_5 \cdot (N_1 - N_2)^2 - N_2^2 \cdot (N_4 - N_5)\right]} = 0$$

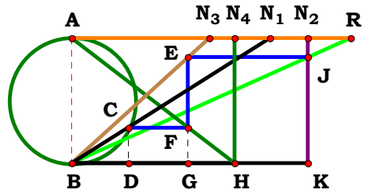
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot C \cdot \sqrt{E} \cdot N_u^3 \cdot \sqrt{N_u^2 \cdot D \cdot (A - B)^2 + A^2 \cdot C^2 \cdot (D - E)}}{A^2 \cdot N_u^3 \cdot \left[C^2 \cdot (D - E) + D \cdot N_u^2\right] - B \cdot D \cdot N_u^5 \cdot (2 \cdot A - B)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot l \cdot n \cdot \sqrt{p} \cdot \sqrt{W^2 \cdot Y \cdot Z^2 \cdot l^2 \cdot \left(X^2 \cdot Z \cdot o - Y \cdot n^2 \cdot p + Z \cdot n^2 \cdot o\right) + V \cdot X^2 \cdot Y \cdot Z^3 \cdot m \cdot o \cdot (V \cdot m - 2 \cdot W \cdot l)}}{Z \cdot \left(V^2 \cdot X^2 \cdot Z \cdot m^2 \cdot o + W^2 \cdot X^2 \cdot Z \cdot l^2 \cdot o - W^2 \cdot Y \cdot l^2 \cdot n^2 \cdot p + W^2 \cdot Z \cdot l^2 \cdot n^2 \cdot o - 2 \cdot V \cdot W \cdot X^2 \cdot Z \cdot l \cdot m \cdot o\right)} = 0$$

2SMT7R3



$N_1 = 1.58586$
$N_2 = 1.88889$
$N_3 = 1.10101$
$N_4 = 1.30303$
$R = 2.23066$

Unit. $AB := 1$ **Given.** $N_1 := 1.58586$ $N_2 := 1.88889$ $N_3 := 1.10101$ $N_4 := 1.30303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

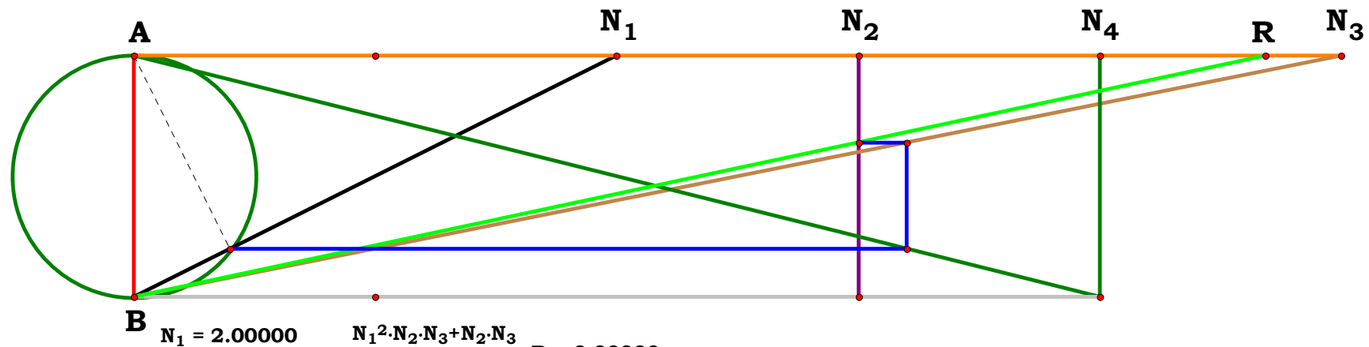
Descriptions.

$BN_1 := \sqrt{N_1^2 + AB^2}$ $BC := \frac{AB^2}{BN_1}$

$CD := \frac{AB \cdot BC}{BN_1}$ $GH := \frac{N_4 \cdot CD}{AB}$

$BG := N_4 - GH$ $EG := \frac{AB \cdot BG}{N_3}$

$R := \frac{N_2 \cdot AB}{EG}$ $R = 2.230659$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 5.00000$
$N_4 = 4.00000$
$R = 4.68750$

$\frac{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3}{N_1^2 \cdot N_4} - R = 0.00000$

Definitions.

$R - \frac{N_1^2 \cdot N_2 \cdot N_3 + N_2 \cdot N_3}{N_1^2 \cdot N_4} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

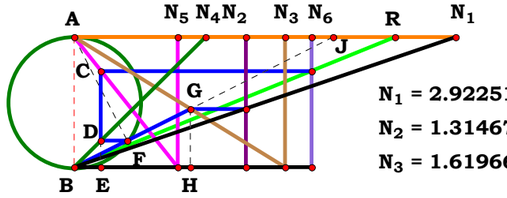
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{D \cdot \left(A^2 + N_u^2\right)}{B \cdot C \cdot N_u} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Y \cdot p \cdot \left(W^2 + m^2\right)}{W^2 \cdot Z \cdot n \cdot o} = 0$

2SMT7R4



$N_1 = 2.92251$
$N_2 = 1.31467$
$N_3 = 1.61966$
$N_4 = 1.00709$
$N_5 = 0.79015$
$N_6 = 1.82065$
$R = 2.45655$

Unit. $AB := 1$ **Given.** $N_1 := 2.92251$ $N_2 := 1.31467$ $N_3 := 1.61966$ $N_4 := 1.00709$ $N_5 := .79015$ $N_6 := 1.82065$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

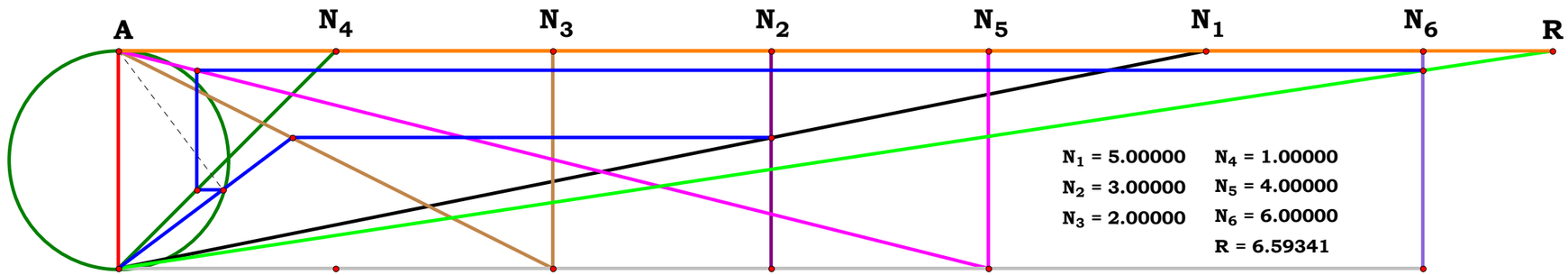
$GH := \frac{N_2}{N_1}$ $BH := N_3 \cdot (AB - GH)$

$AJ := \frac{BH}{GH}$ $BJ := \sqrt{AB^2 + AJ^2}$

$BF := \frac{AB^2}{BJ}$ $DE := \frac{BF}{BJ}$

$BE := DE \cdot N_4$ $CE := AB - \frac{BE}{N_5}$

$R := \frac{N_6}{CE}$ $R = 2.456551$



$N_1 = 5.00000$ $N_4 = 1.00000$
$N_2 = 3.00000$ $N_5 = 4.00000$
$N_3 = 2.00000$ $N_6 = 6.00000$
$R = 6.59341$

Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot \left[N_1 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_3^2 + 1)\right]}{N_5 \cdot \left[N_1 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_3^2 + 1)\right] - N_2^2 \cdot N_4} = 0$$

$$\frac{N_5 \cdot N_6 \cdot (N_1 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_3^2 + 1))}{N_5 \cdot (N_1 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_3^2 + 1)) - N_2^2 \cdot N_4} - R = 0.00000$$

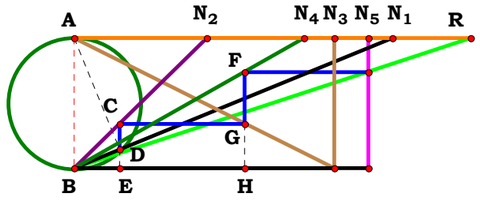
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u^3 \cdot D \cdot (A - B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u}{N_u^2 \cdot D \cdot F \cdot (A - B)^2 + A^2 \cdot C^2 \cdot F \cdot (D - E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot Y \cdot Z \cdot n \cdot (U \cdot l - V \cdot k)^2 + V^2 \cdot Y \cdot Z \cdot k^2 \cdot m^2 \cdot n}{W^2 \cdot Y \cdot n \cdot p \cdot (U \cdot l - V \cdot k)^2 + V^2 \cdot k^2 \cdot m^2 \cdot p \cdot (Y \cdot n - X \cdot o)} = 0$$

2SMT7R5



$N_1 = 2.43822$
$N_2 = 1.01441$
$N_3 = 1.99741$
$N_4 = 1.76258$
$N_5 = 2.25271$
$R = 3.03998$

Unit. $AB := 1$ Given. $N_1 := 2.43822$ $N_2 := 1.01441$ $N_3 := 1.99741$

$N_4 := 1.76258$ $N_5 := 2.25271$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

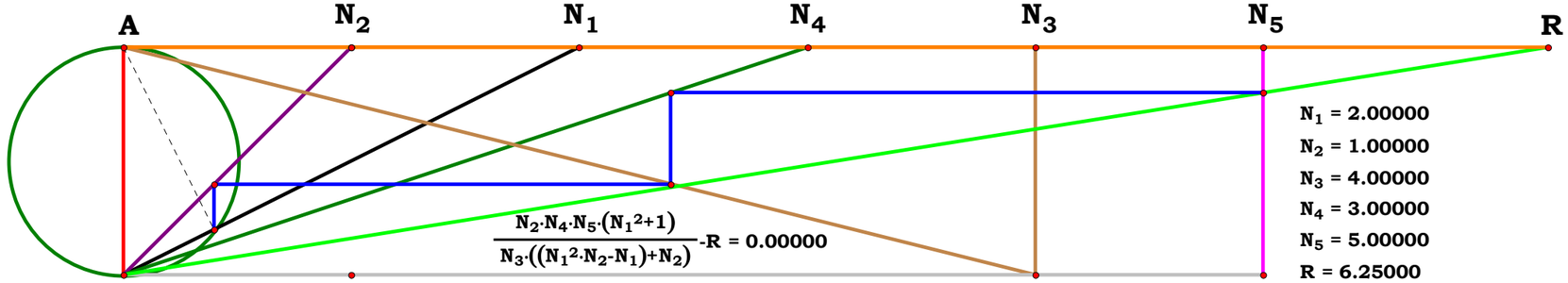
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{AB^2}{BN_1}$

$DE := \frac{BD}{BN_1}$ $BE := N_1 \cdot DE$

$CE := \frac{BE}{N_2}$ $BH := N_3 \cdot (AB - CE)$

$FH := \frac{BH}{N_4}$ $R := \frac{N_5}{FH}$

$R = 3.03998$



Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot \left(N_1^2 + 1\right)}{N_3 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)} = 0$$

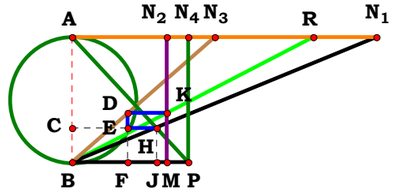
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right)}{D \cdot E \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot Z \cdot n \cdot \left(V^2 + l^2\right)}{o \cdot p \cdot X \cdot \left(W \cdot V^2 - m \cdot V \cdot l + W \cdot l^2\right)} = 0$$

2SMT7R6



$N_1 = 2.43434$
$N_2 = 0.75758$
$N_3 = 1.14141$
$N_4 = 0.92929$
$R = 1.93380$

Unit. $AB := 1$ **Given.** $N_1 := 2.43434$ $N_2 := .75758$ $N_3 := 1.14141$ $N_4 := .92929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

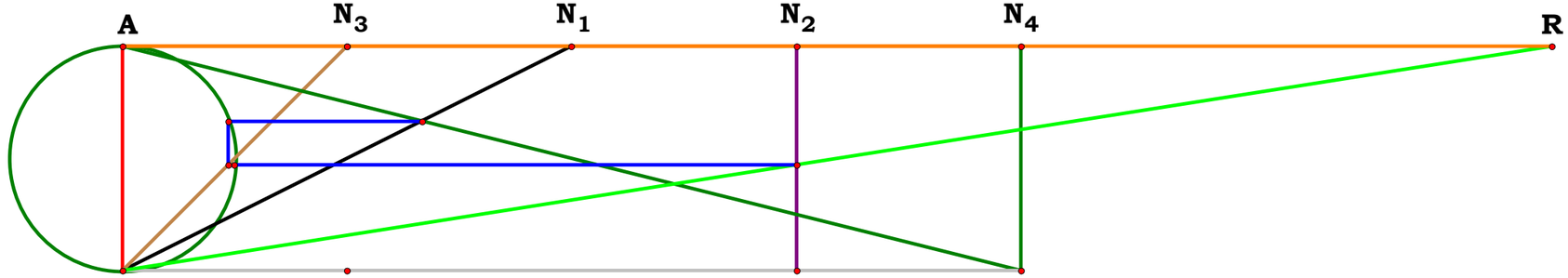
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$HJ := \frac{AB \cdot N_4}{N_4 + N_1}$ $CE := \sqrt{HJ \cdot (AB - HJ)}$

$DF := \frac{AB \cdot CE}{N_3}$ $R := \frac{N_2 \cdot AB}{DF}$

$R = 1.933803$



Definitions.

$R - \frac{N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{N_1 \cdot N_4}} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot (A + D)}{A \cdot B \cdot C \cdot D} = 0$

B

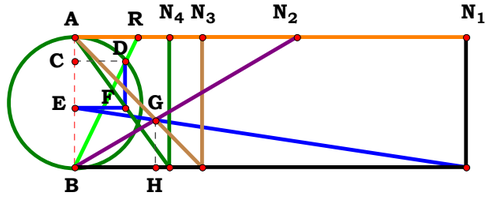
$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$R = 6.36396$

$\frac{N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{N_1 \cdot N_4}} - R = 0.00000$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Y \cdot (W \cdot p + Z \cdot m) \cdot \sqrt{m \cdot p}}{m \cdot n \cdot o \cdot p \cdot \sqrt{W \cdot Z}} = 0$

2SMT8R0



$N_1 = 3.00000$
$N_2 = 1.70210$
$N_3 = 0.98040$
$N_4 = 0.72621$
$R = 0.48245$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.70210$ $N_3 := .98040$ $N_4 := .72621$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

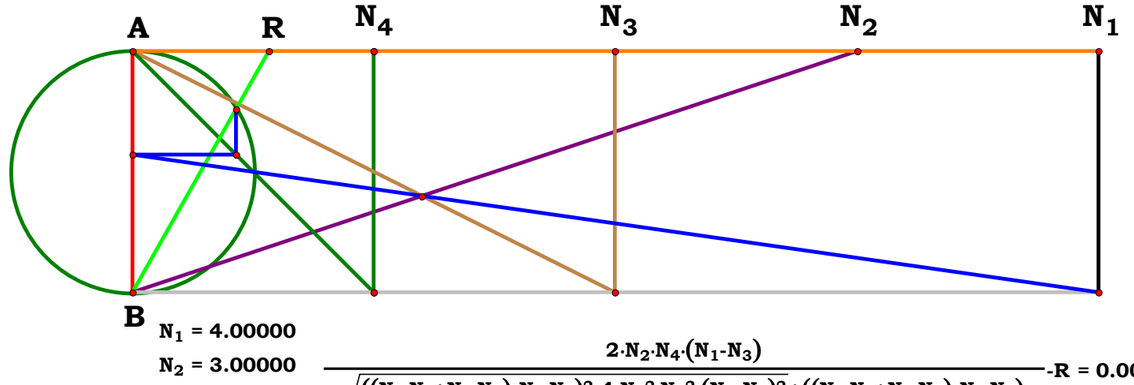
Descriptions.

$GH := \frac{N_3}{N_2 + N_3}$ $BH := \frac{N_2 \cdot N_3}{N_2 + N_3}$

$BE := \frac{GH \cdot N_1}{N_1 - BH}$ $CD := N_4 \cdot (AB - BE)$

$AC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - CD^2}$ $R := \frac{CD}{AB - AC}$

$R = 0.482453$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 1.00000$
$R = 0.56574$

$$\frac{2 \cdot N_2 \cdot N_4 \cdot (N_1 - N_3)}{\sqrt{((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)^2 - 4 \cdot N_2^2 \cdot N_4^2 \cdot (N_1 - N_3)^2} + ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_4 \cdot (N_1 - N_3)}{\sqrt{(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)^2 - 4 \cdot N_2^2 \cdot N_4^2 \cdot (N_1 - N_3)^2} + N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3} = 0$$

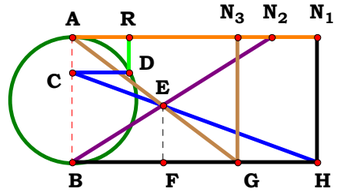
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u \cdot (A - C)}{D \cdot (A - B - C) - \sqrt{D^2 \cdot (A - B - C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X \cdot Z \cdot (W \cdot o - Y \cdot m)}{\sqrt{[W \cdot (X \cdot o \cdot p - 2 \cdot X \cdot Z \cdot o + Y \cdot n \cdot p) + X \cdot Y \cdot m \cdot (2 \cdot Z - p)] \cdot [W \cdot (2 \cdot X \cdot Z \cdot o + X \cdot o \cdot p + Y \cdot n \cdot p) - X \cdot Y \cdot m \cdot (2 \cdot Z + p)]} + W \cdot X \cdot o \cdot p + W \cdot Y \cdot n \cdot p - X \cdot Y \cdot m \cdot p} = 0$$

2SMT8R1



$N_1 = 1.95960$
$N_2 = 1.59596$
$N_3 = 1.32323$
$R = 0.44970$

Unit. $AB := 1$ Given. $N_1 := 1.95960$ $N_2 := 1.59596$ $N_3 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$EF := \frac{AB \cdot N_3}{N_3 + N_2} \qquad BF := \frac{N_2 \cdot EF}{AB}$$

$$BC := \frac{EF \cdot N_1}{N_1 - BF} \qquad R := \sqrt{BC \cdot (AB - BC)}$$

$R = 0.449703$

Definitions.

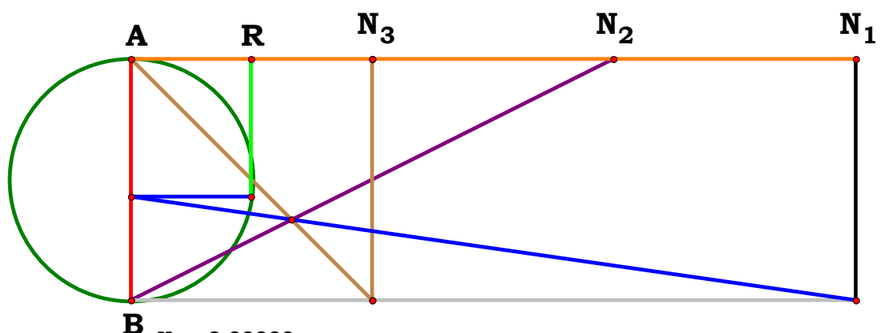
$$R - \frac{\sqrt{N_1 \cdot N_2 \cdot N_3 \cdot (N_1 - N_3)}}{(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B} \cdot \sqrt{C - A}}{B - A + C} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

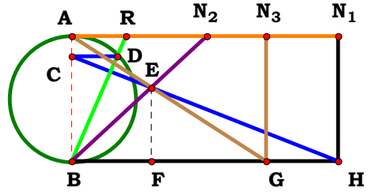
$$R - \frac{\sqrt{p} \cdot \sqrt{X \cdot Y \cdot Z \cdot (X \cdot q - Z \cdot o)}}{X \cdot Y \cdot q + X \cdot Z \cdot p - Y \cdot Z \cdot o} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.49487$

$$\frac{\sqrt{N_1 \cdot N_2 \cdot N_3 \cdot (N_1 - N_3)}}{(N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3} - R = 0.00000$$

2SMT8R2



$N_1 = 2.13131$
$N_2 = 1.08081$
$N_3 = 1.55556$
$R = 0.43324$

Unit. $AB := 1$ Given. $N_1 := 2.13131$ $N_2 := 1.08081$ $N_3 := 1.55556$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$EF := \frac{AB \cdot N_3}{N_3 + N_2}$ $BF := \frac{N_2 \cdot EF}{AB}$

$BC := \frac{EF \cdot N_1}{N_1 - BF}$ $CD := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CD \cdot AB}{BC}$ $R = 0.433236$

Definitions.

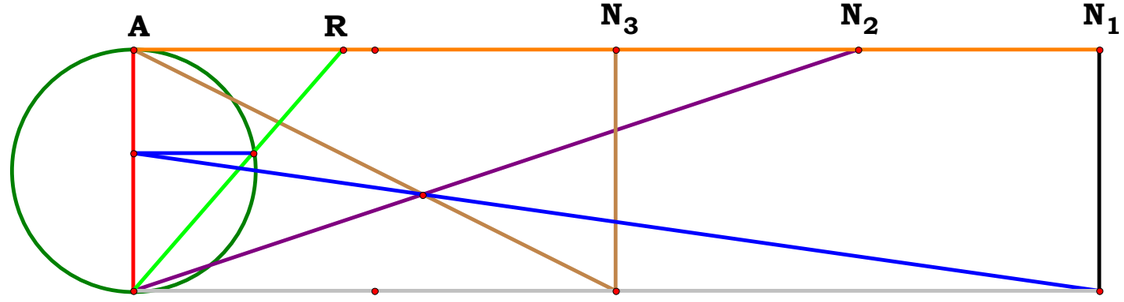
$$R - \frac{\sqrt{\left(N_1^{\,2} \cdot N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3^{\,2}\right)}}{N_1 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{C - A}}{\sqrt{B}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

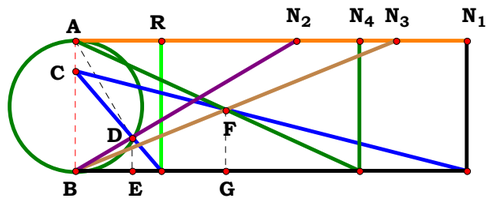
$$R - \frac{\sqrt{X \cdot Y \cdot Z \cdot (X \cdot q - Z \cdot o)}}{X \cdot Z \cdot \sqrt{p}} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$R = 0.86603$

$\frac{\sqrt{N_1^{\,2} \cdot N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3^{\,2}}}{N_1 \cdot N_3} - R = 0.00000$

2SMT8R4



$N_1 = 3.00000$
$N_2 = 1.69242$
$N_3 = 2.46232$
$N_4 = 2.17907$
$R = 0.66238$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.69242$ $N_3 := 2.46232$ $N_4 := 2.17907$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

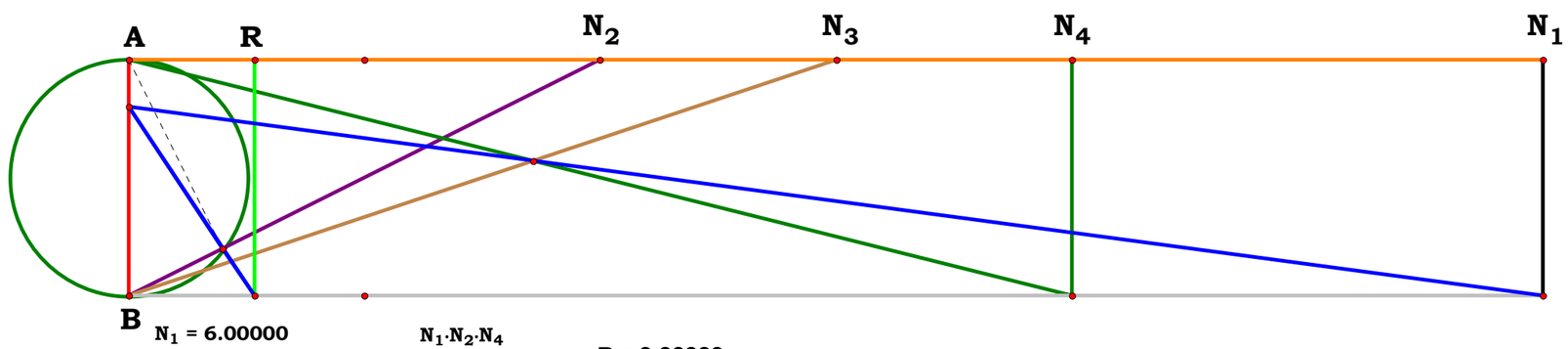
$FG := \frac{N_4}{N_3 + N_4}$ $BG := FG \cdot N_3$

$BC := \frac{FG \cdot N_1}{N_1 - BG}$

$BN_2 := \sqrt{AB^2 + N_2^2}$ $BD := \frac{AB^2}{BN_2}$

$DE := \frac{BD}{BN_2}$ $BE := N_2 \cdot DE$

$R := \frac{BE \cdot BC}{BC - DE}$ $R = 0.662377$



$N_1 = 6.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 0.53333$

$\frac{N_1 \cdot N_2 \cdot N_4}{(N_1 \cdot N_2^2 \cdot N_4 - N_1 \cdot N_3) + N_3 \cdot N_4} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_4}{N_1 \cdot N_2^2 \cdot N_4 - N_1 \cdot N_3 + N_3 \cdot N_4} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

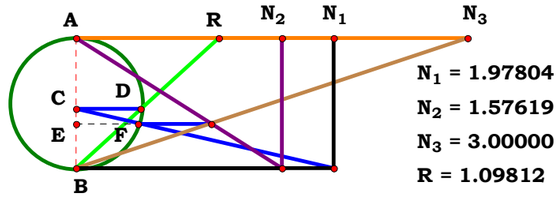
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{B \cdot C \cdot N_u}{B^2 \cdot (A - D) + C \cdot N_u^2} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot X \cdot Z \cdot n \cdot o}{W \cdot \left(X^2 \cdot Z \cdot o - Y \cdot n^2 \cdot p\right) + Y \cdot Z \cdot m \cdot n^2} = 0$

2SMT8R5



$N_1 = 1.97804$
$N_2 = 1.57619$
$N_3 = 3.00000$
$R = 1.09812$

Unit. $AB := 1$ **Given.** $N_1 := 1.97804$ $N_2 := 1.57619$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BE := \frac{N_2}{N_2 + N_3} \qquad EF := \sqrt{BE \cdot (AB - BE)}$$

$$BC := \frac{BE \cdot N_1}{N_1 - EF} \qquad CD := \sqrt{BC \cdot (AB - BC)}$$

$$R := \frac{CD}{BC} \qquad R = 1.098117$$

Definitions.

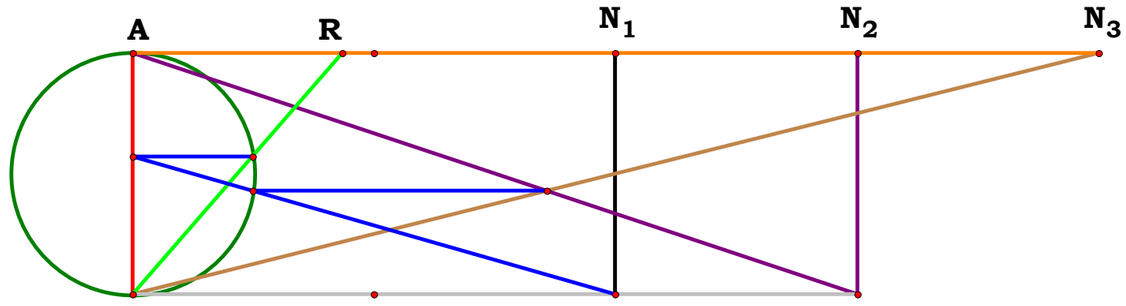
$$R - \frac{\sqrt{N_1 \cdot N_2 \cdot \left(N_1 \cdot N_3 - \sqrt{N_2 \cdot N_3}\right)}}{N_1 \cdot N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{B \cdot \sqrt{N_u \cdot \left(N_u \cdot \sqrt{B \cdot C} - A \cdot C\right)}}{N_u \cdot (B \cdot C)^{\frac{3}{4}}} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

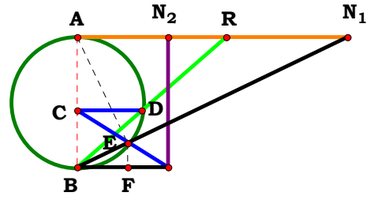
$$R - \frac{p \cdot \sqrt{X \cdot Y \cdot \left(X \cdot Z \cdot \sqrt{p \cdot q} - o \cdot q \cdot \sqrt{Y \cdot Z}\right)}}{X \cdot Y \cdot \sqrt{p \cdot q \cdot \sqrt{p \cdot q}}} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.86947$

$$\frac{\sqrt{N_1 \cdot N_2 \cdot \left(N_1 \cdot N_3 - \sqrt{N_2 \cdot N_3}\right)}}{N_1 \cdot N_2} - R = 0.00000$$

2SMT8R6



$N_1 = 2.07016$

$N_2 = 0.69478$

$R = 1.14280$

Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := .69478$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

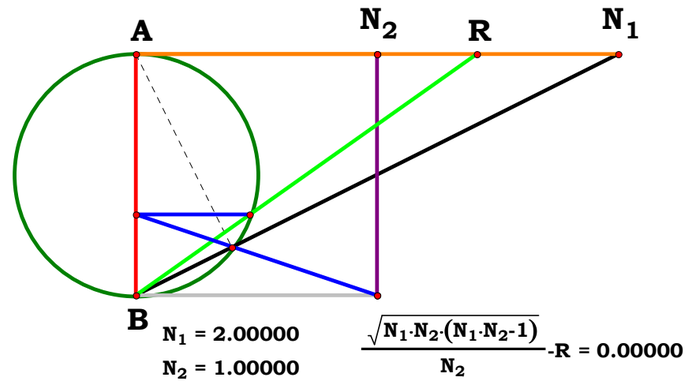
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{AB^2}{BN_1}$

$EF := \frac{BE}{BN_1}$ $BF := N_1 \cdot EF$

$BC := \frac{EF \cdot N_2}{N_2 - BF}$ $CD := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CD}{BC}$ $R = 1.142791$



$N_1 = 2.00000$

$N_2 = 1.00000$

$R = 1.41421$

$\frac{\sqrt{N_1 \cdot N_2 \cdot (N_1 \cdot N_2 - 1)}}{N_2} - R = 0.00000$

Definitions.

$R - \frac{\sqrt{N_1 \cdot N_2 \cdot (N_1 \cdot N_2 - 1)}}{N_2} = 0$

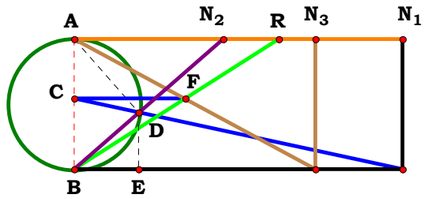
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{\sqrt{N_u^2 - A \cdot B}}{A} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{Y \cdot Z \cdot (Y \cdot Z - p \cdot q)}}{Z \cdot p} = 0$

2SMT8R7



$N_1 = 2.51571$
$N_2 = 1.14033$
$N_3 = 1.85212$
$R = 1.56887$

Unit. $AB := 1$ Given. $N_1 := 2.5157$ $N_2 := 1.14033$ $N_3 := 1.85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_2 := \sqrt{AB^2 + N_2^2}$ $BD := \frac{AB^2}{BN_2}$

$DE := \frac{BD}{BN_2}$ $BE := N_2 \cdot DE$

$BC := \frac{DE \cdot N_1}{N_1 - BE}$ $CF := N_3 \cdot (AB - BC)$

$R := \frac{CF}{BC}$ $R = 1.56887$

Definitions.

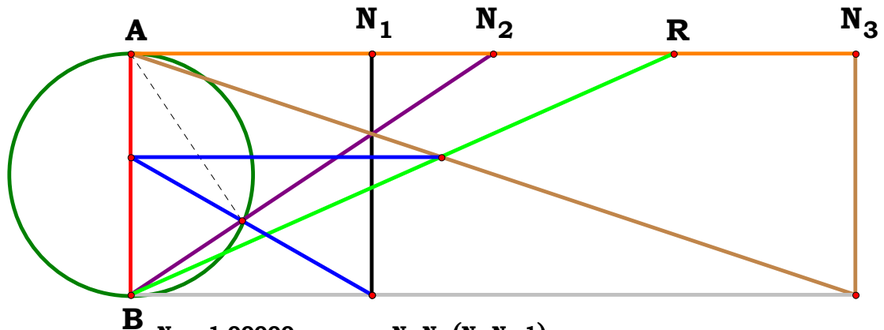
$R - \frac{N_2 \cdot N_3 \cdot (N_1 \cdot N_2 - 1)}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u^3 - A \cdot B \cdot N_u}{B^2 \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

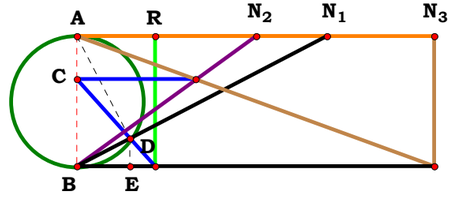
$R - \frac{Y \cdot Z \cdot (X \cdot Y - o \cdot p)}{X \cdot p^2 \cdot q} = 0$



$N_1 = 1.00000$
$N_2 = 1.50000$
$N_3 = 3.00000$
$R = 2.25000$

$\frac{N_2 \cdot N_3 \cdot (N_1 \cdot N_2 - 1)}{N_1} - R = 0.00000$

2SMT8R8



$N_1 = 1.91519$
$N_2 = 1.37279$
$N_3 = 2.74321$
$R = 0.60463$

Unit. $AB := 1$ Given. $N_1 := 1.91519$ $N_2 := 1.37279$ $N_3 := 2.74321$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BC := \frac{N_3}{N_2 + N_3}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$BD := \frac{AB^2}{BN_1}$ $DE := \frac{BD}{BN_1}$

$BE := N_1 \cdot DE$ $R := \frac{BE \cdot BC}{BC - DE}$

$R = 0.604634$

Definitions.

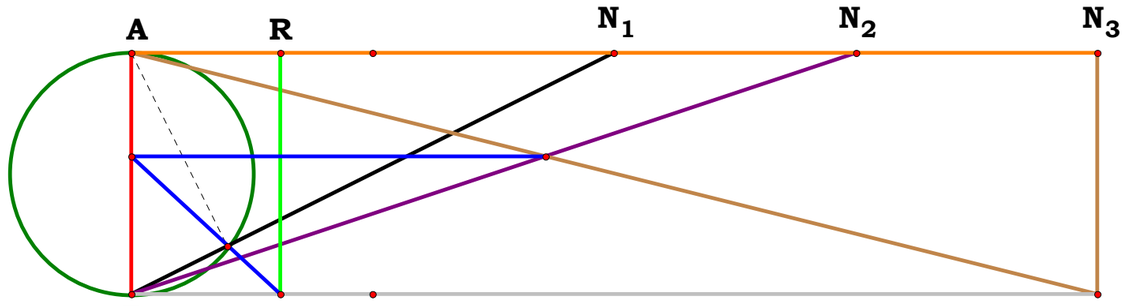
$R - \frac{N_1 \cdot N_3}{N_1^2 \cdot N_3 - N_2} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot B \cdot N_u}{B \cdot N_u^2 - A^2 \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{X \cdot Z \cdot o \cdot p}{X^2 \cdot Z \cdot p - Y \cdot o^2 \cdot q} = 0$

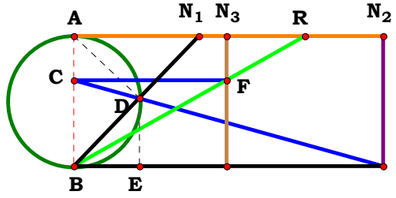


B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.61538$

$\frac{N_1 \cdot N_3}{N_1^2 \cdot N_3 - N_2} - R = 0.00000$

2SMT8R9



$N_1 = 0.95630$
$N_2 = 2.37042$
$N_3 = 1.17412$
$R = 1.77418$

Unit. $AB := 1$ **Given.** $N_1 := .95630$ $N_2 := 2.37042$ $N_3 := 1.17412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

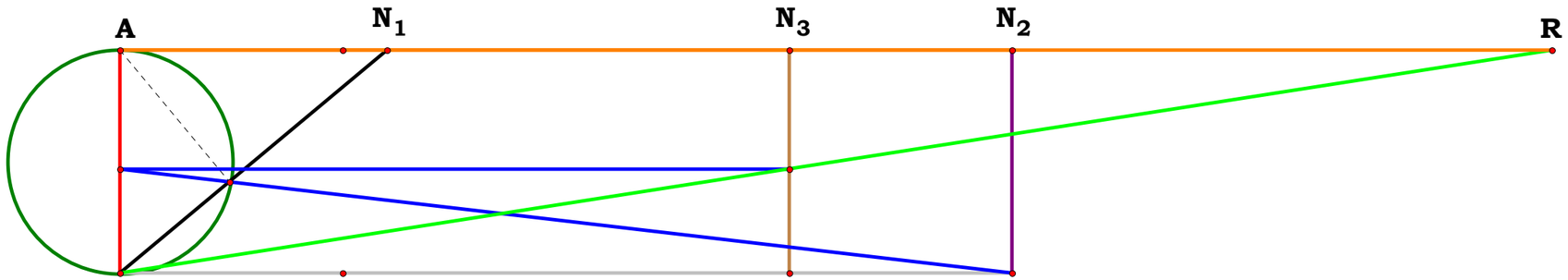
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{AB^2}{BN_1}$

$DE := \frac{BD}{BN_1}$ $BE := N_1 \cdot DE$

$BC := \frac{DE \cdot N_2}{N_2 - BE}$ $R := \frac{N_3}{BC}$

$R = 1.774188$



Definitions.

$$R - \frac{N_3 \cdot \left(N_1^2 \cdot N_2 - N_1 + N_2\right)}{N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{A^2 \cdot C} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

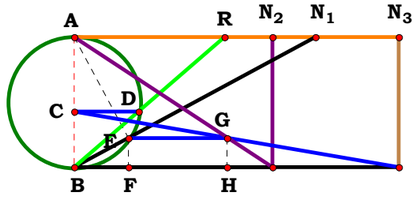
$$R - \frac{Z \cdot \left(Y \cdot X^2 - p \cdot X \cdot o + Y \cdot o^2\right)}{Y \cdot o^2 \cdot q} = 0$$

B

$N_1 = 1.20000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$R = 6.42000$

$\frac{N_3 \cdot ((N_1^2 \cdot N_2 - N_1) + N_2)}{N_2} - R = 0.00000$

2SMT8R10



$N_1 = 1.84739$
$N_2 = 1.51808$
$N_3 = 2.49138$
$R = 1.15469$

Unit. $AB := 1$ **Given.** $N_1 := 1.84739$ $N_2 := 1.51808$ $N_3 := 2.49138$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{AB^2}{BN_1}$

$EF := \frac{BE}{BN_1}$ $BH := N_2 \cdot (AB - EF)$

$BC := \frac{EF \cdot N_3}{N_3 - BH}$ $CD := \sqrt{BC \cdot (AB - BC)}$

$R := \frac{CD}{BC}$ $R = 1.154681$

Definitions.

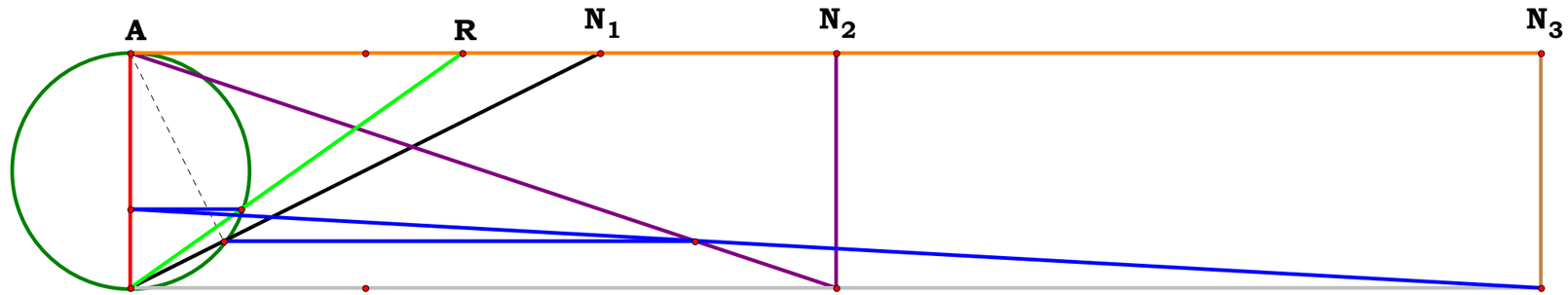
$R - \frac{\sqrt{N_1^2 \cdot N_3 \cdot (N_3 - N_2)}}{N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \sqrt{B - C}}{A \cdot \sqrt{B}} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

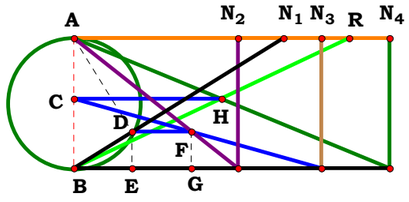
$R - \frac{X \cdot \sqrt{Z^2 \cdot p - Y \cdot Z \cdot q}}{Z \cdot o \cdot \sqrt{p}} = 0$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 6.00000$
$R = 1.41421$

$\frac{\sqrt{N_1^2 \cdot N_3 \cdot (N_3 - N_2)}}{N_3} - R = 0.00000$

2SMT8R11



$N_1 = 1.60525$
$N_2 = 1.25656$
$N_3 = 1.90055$
$N_4 = 2.42122$
$R = 2.11406$

Unit. $AB := 1$ Given. $N_1 := 1.60525$ $N_2 := 1.25656$ $N_3 := 1.90055$ $N_4 := 2.42122$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

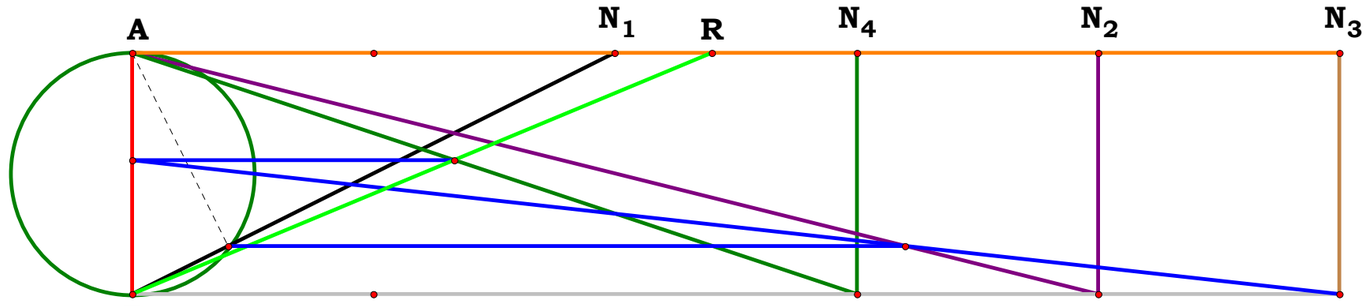
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{AB^2}{BN_1}$

$DE := \frac{BD}{BN_1}$ $BE := N_1 \cdot DE$

$BG := N_2 \cdot (AB - DE)$ $BC := \frac{DE \cdot N_3}{N_3 - BG}$

$CH := N_4 \cdot (AB - BC)$ $R := \frac{CH}{BC}$

$R = 2.11407$



Definitions.

$$R - \frac{N_1^2 \cdot N_4 \cdot (N_3 - N_2)}{N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^3 \cdot (B - C)}{A^2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

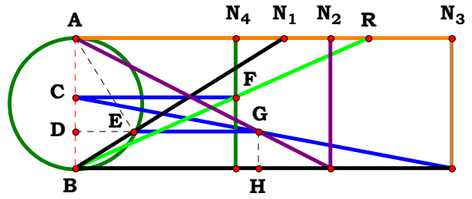
$$R - \frac{W^2 \cdot Z \cdot (Y \cdot n - X \cdot o)}{Y \cdot m^2 \cdot n \cdot p} = 0$$

B

$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 5.00000$
$N_4 = 3.00000$
$R = 2.40000$

$\frac{N_1^2 \cdot N_4 \cdot (N_3 - N_2)}{N_3} - R = 0.00000$

2SMT8R12



$N_1 = 1.59556$
$N_2 = 1.95394$
$N_3 = 2.88850$
$N_4 = 1.22987$
$R = 2.24289$

Unit. $AB := 1$ Given. $N_1 := 1.59556$ $N_2 := 1.95394$ $N_3 := 2.88850$ $N_4 := 1.22987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

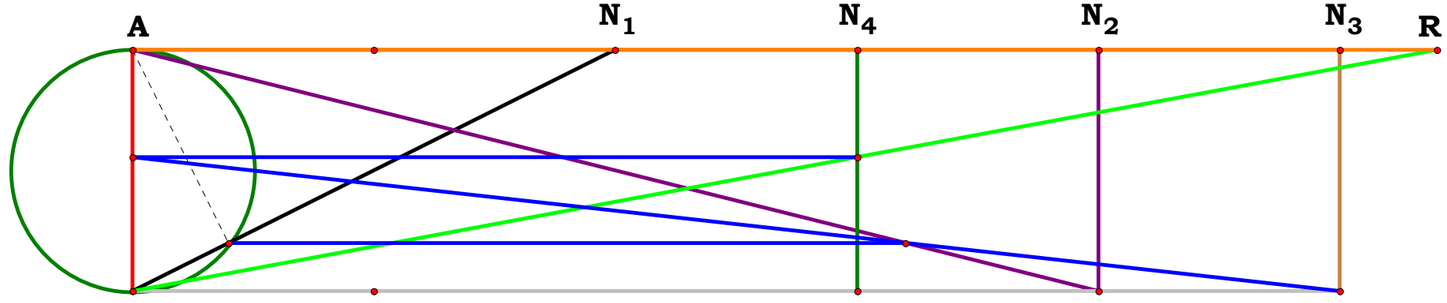
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{AB^2}{BN_1}$

$BD := \frac{BE}{BN_1}$ $BH := N_2 \cdot (AB - BD)$

$BC := \frac{BD \cdot N_3}{N_3 - BH}$ $R := \frac{N_4}{BC}$

$R = 2.242895$



Definitions.

$$R - \frac{N_4 \cdot \left[N_3 - N_1^2 \cdot (N_2 - N_3)\right]}{N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^3 \cdot (B - C) + A^2 \cdot B \cdot N_u}{A^2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot Z \cdot (Y \cdot n - X \cdot o) + Y \cdot Z \cdot m^2 \cdot n}{Y \cdot m^2 \cdot n \cdot p} = 0$$

B

$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 5.00000$
$N_4 = 3.00000$
$R = 5.40000$

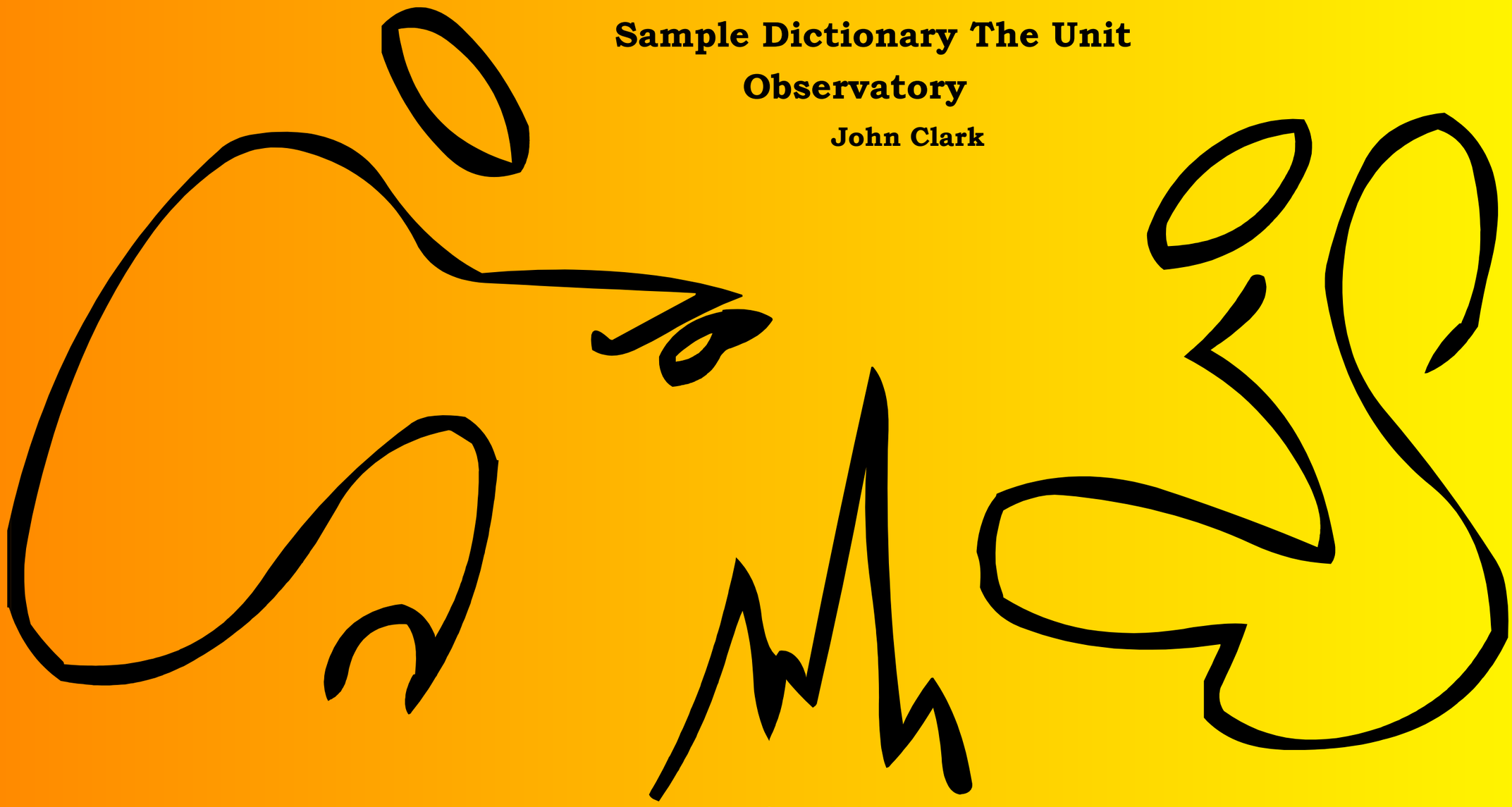
$\frac{N_4 \cdot (N_3 - N_1^2 \cdot (N_2 - N_3))}{N_3} - R = 0.00000$

Basic Analog Grammar

Sample Dictionary The Unit

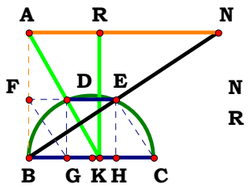
Observatory

John Clark



John 312

3OBT1R0



N = 1.51515
R = 0.56163

Unit. $AB := 1$ **Given.** $N := 1.51515$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

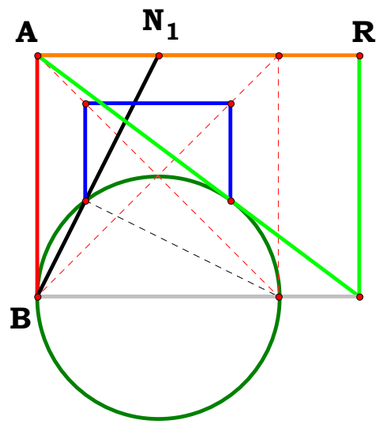
$BN := \sqrt{N^2 + AB^2}$ $BE := \frac{N \cdot AB}{BN}$

$EH := \frac{AB \cdot BE}{BN}$ $CE := \frac{AB^2}{BN}$

$CH := \sqrt{CE^2 - EH^2}$ $BG := CH$

$BK := \frac{BG \cdot AB}{AB - EH}$ $R := BK$

$R = 0.561631$



N_1 = 0.50000
R = 1.33333
$\frac{1}{(N_1^2 - N_1) + 1} - R$ = 0.00000

Definitions.

$R - \frac{1}{N^2 - N + 1} = 0$

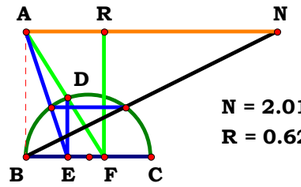
$N - \frac{N_u}{A} = 0$

$R - \frac{A^2}{A^2 - A \cdot N_u + N_u^2} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q^2}{Z^2 - Z \cdot q + q^2} = 0$

3OBT1R1



N = 2.01010
R = 0.62287

Unit. $AB := 1$ **Given.** $N := 2.01010$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BE := \frac{1}{N^2 - \left(\sqrt{N^2}\right) + 1}$ $CE := AB - BE$

$DE := \sqrt{BE \cdot CE}$ $BF := \frac{BE \cdot AB}{AB - DE}$

$R := BF$ $R = 0.622867$

Definitions.

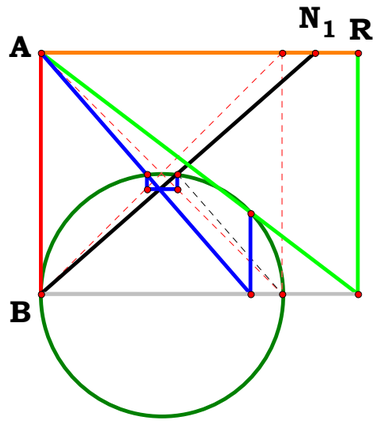
$$R - \frac{1}{\left(N^2 - N - \sqrt{N^2 - N} + 1\right)} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A^2}{A^2 + N_u \cdot \left(N_u - A\right) - A \cdot \sqrt{N_u \cdot \left(N_u - A\right)}} = 0$$

$$N - \frac{Z}{q} = 0$$

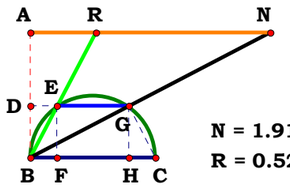
$$R - \frac{q^2}{Z^2 - q \cdot \sqrt{Z^2 - Z \cdot q} + q^2 - Z \cdot q} = 0$$



$N_1 = 1.13333$
$R = 1.31168$

$$\frac{1}{\left(N_1^2 - N_1 - \sqrt{N_1^2 - N_1}\right) + 1} - R = 0.00000$$

3OBT1R2



N = 1.91919

R = 0.52105

Unit. $AB := 1$ Given. $N := 1.91919$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BN := \sqrt{AB^2 + N^2}$ $BG := \frac{N \cdot AB}{BN}$

$BH := \frac{N \cdot BG}{BN}$ $BF := AB - BH$

$BD := \frac{AB \cdot BG}{BN}$ $R := \frac{BF \cdot AB}{BD}$

$R = 0.521053$

Definitions.

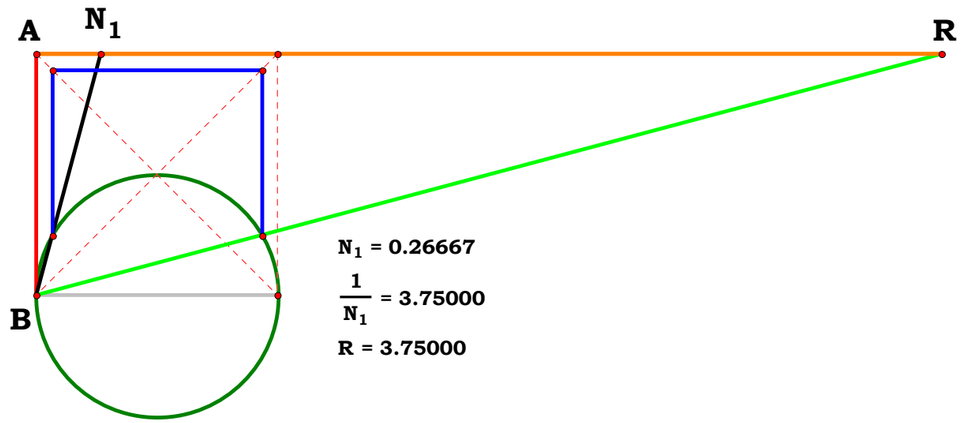
$R - \frac{1}{N} = 0$

$N - \frac{N_u}{A} = 0$

$R - \frac{A}{N_u} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q}{Z} = 0$

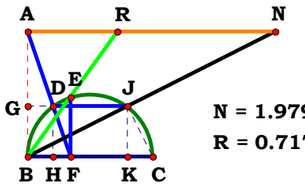


$N_1 = 0.26667$

$\frac{1}{N_1} = 3.75000$

$R = 3.75000$

3OBT1R3



N = 1.97980
R = 0.71799

Unit. $AB := 1$ **Given.** $N := 1.97980$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

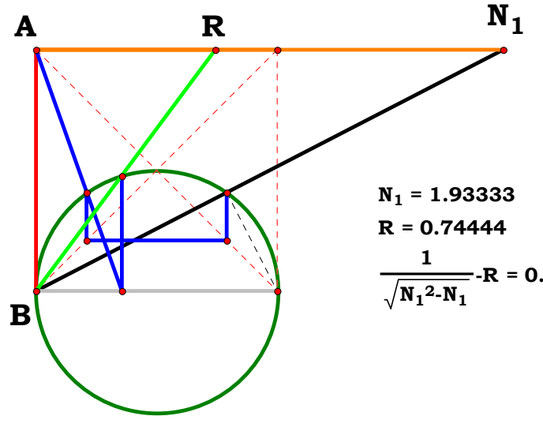
$BN := \sqrt{AB^2 + N^2}$ $BJ := \frac{N \cdot AB}{BN}$

$BK := \frac{N \cdot BJ}{BN}$ $BH := AB - BK$

$BG := \frac{AB \cdot BK}{N}$ $BF := \frac{BH \cdot AB}{AB - BG}$

$EF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.717994$



$N_1 = 1.93333$
$R = 0.74444$
$\frac{1}{\sqrt{N_1^2 - N_1}} - R = 0.00000$

Definitions.

$R - \frac{1}{\sqrt{N^2 - N}} = 0$

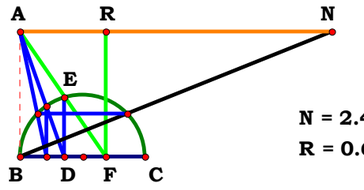
$N - \frac{N_u}{A} = 0$

$R - \frac{A}{\sqrt{N_u \cdot (N_u - A)}} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q}{\sqrt{Z \cdot (Z - q)}} = 0$

3OBT1R4



N = 2.49495
R = 0.68613

Unit. $AB := 1$ Given. $N := 2.49495$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BD := \frac{1}{N^2 - \sqrt{N^2} - \sqrt{N^2 - \sqrt{N^2}} + 1} \qquad CD := AB - BD$$

$$DE := \sqrt{BD \cdot CD} \qquad BF := \frac{BD \cdot AB}{AB - DE}$$

$R := BF$ $R = 0.68613$

Definitions.

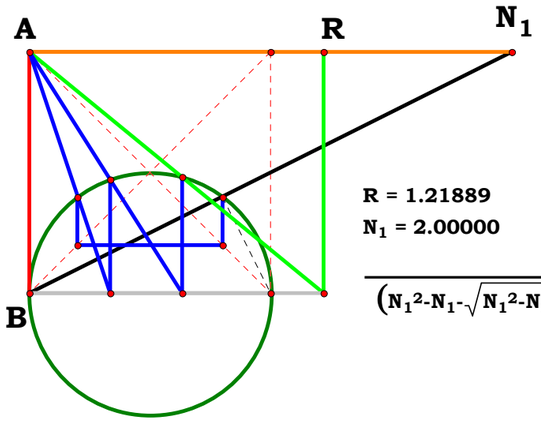
$$R - \frac{1}{N^2 - N - \sqrt{N^2 - N - \sqrt{N^2 - N} - \sqrt{N^2 - N}} + 1} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A^2}{A^2 - A \cdot \sqrt{N_u \cdot (N_u - A)} - A \cdot \sqrt{N_u \cdot (N_u - A)} + N_u \cdot (N_u - A) - A \cdot \sqrt{N_u \cdot (N_u - A)}} = 0$$

$$N - \frac{Z}{q} = 0$$

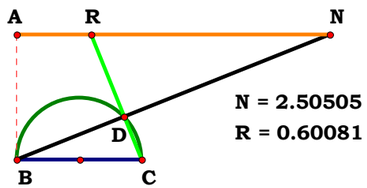
$$R - \frac{q^2}{Z^2 - q \cdot \sqrt{Z^2 - q \cdot \sqrt{Z^2 - Z \cdot q}} - Z \cdot q - q \cdot \sqrt{Z^2 - Z \cdot q} + q^2 - Z \cdot q} = 0$$



R = 1.21889
N_1 = 2.00000

$$\frac{1}{\left(N_1^2 - N_1 - \sqrt{N_1^2 - N_1 - \sqrt{N_1^2 - N_1}} - \sqrt{N_1^2 - N_1}\right) + 1} - R = 0.00000$$

3OBT1R5



N = 2.50505
R = 0.60081

Unit. $AB := 1$ Given. $N := 2.50505$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BN := \sqrt{N^2 + AB^2}$ $BD := \frac{N \cdot AB}{BN}$

$DN := BN - BD$ $NR := \frac{BN \cdot DN}{N}$

$R := N - NR$ $R = 0.600806$

Definitions.

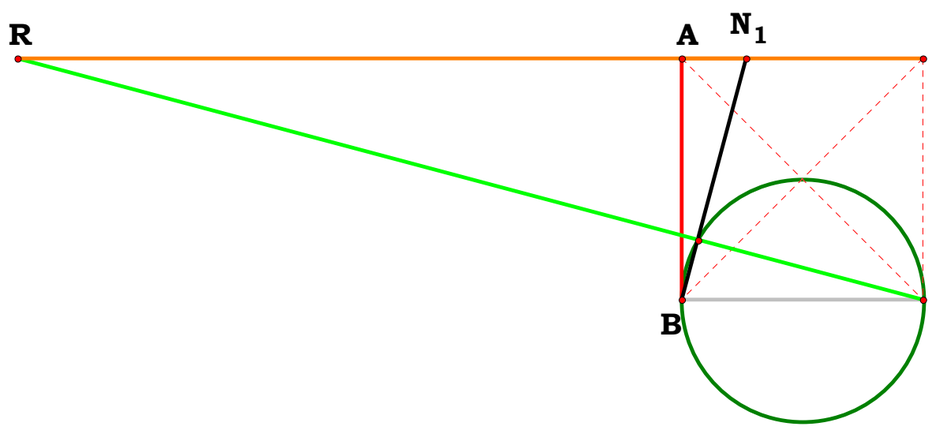
$R - \frac{N - 1}{N} = 0$

$N - \frac{N_u}{A} = 0$

$R - \frac{N_u - A}{N_u} = 0$

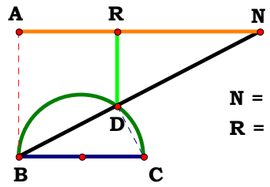
$N - \frac{Z}{q} = 0$

$R - \frac{Z - q}{Z} = 0$



$N_1 = 0.26667$
R = -2.75000
$\frac{N_1 - 1}{N_1} - R = 0.00000$

3OBT1R6



N = 1.92929
R = 0.78823

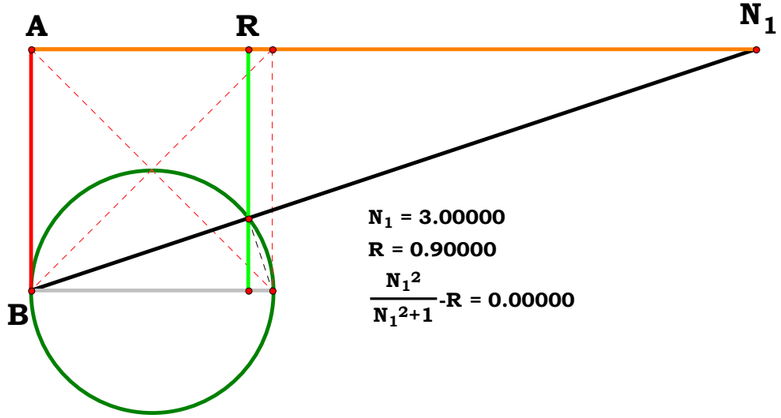
Unit. $AB := 1$ Given. $N := 1.92929$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BD := \frac{N}{\left(N^2+1\right)^{\frac{1}{2}}} \qquad BN := \sqrt{N^2+AB^2}$$

$$R := \frac{N \cdot BD}{BN} \qquad R = 0.788232$$



$N_1 = 3.00000$
$R = 0.90000$
$\frac{N_1^2}{N_1^2+1} - R = 0.00000$

Definitions.

$$R - \frac{N^2}{N^2+1} = 0$$

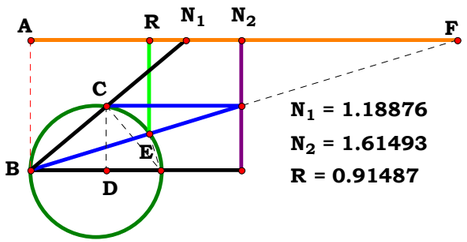
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u^2}{A^2+N_u^2} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z^2}{Z^2+q^2} = 0$$

3OBT1R7



$N_1 = 1.18876$

$N_2 = 1.61493$

$R = 0.91487$

Unit. $AB := 1$ Given. $N_1 := 1.18876$ $N_2 := 1.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BC := \frac{N_1}{BN_1}$

$CD := \frac{BC}{BN_1}$ $AF := \frac{N_2}{CD}$

$BF := \sqrt{AB^2 + AF^2}$ $BE := \frac{AF}{BF}$

$R := AF \cdot \frac{BE}{BF}$ $R = 0.914872$

Definitions.

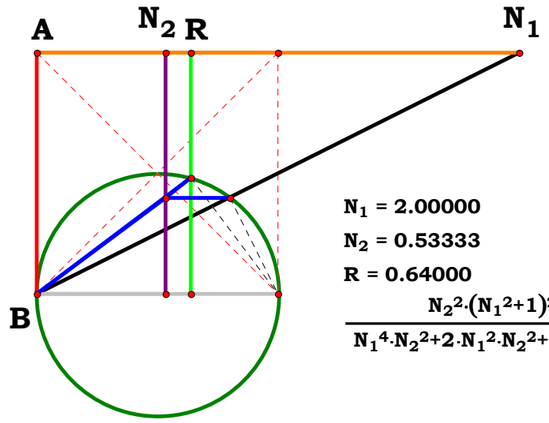
$$R - \frac{N_2^2 \cdot \left(N_1^2 + 1\right)^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\left(A^2 + N_u^2\right)^2}{A^4 + A^2 \cdot B^2 + N_u^2 \cdot \left(2 \cdot A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z^2 \cdot \left(Y^2 + p^2\right)^2}{Y^4 \cdot Z^2 + 2 \cdot Y^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot p^2 \cdot q^2 + Z^2 \cdot p^4} = 0$$



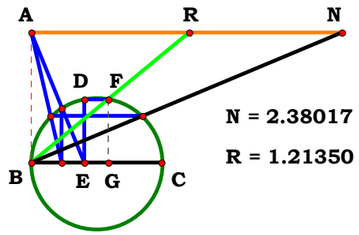
$N_1 = 2.00000$

$N_2 = 0.53333$

$R = 0.64000$

$$\frac{N_2^2 \cdot (N_1^2+1)^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} - R = 0.00000$$

3OBT1R8



Unit. $AB := 1$ Given. $N := 2.38017$

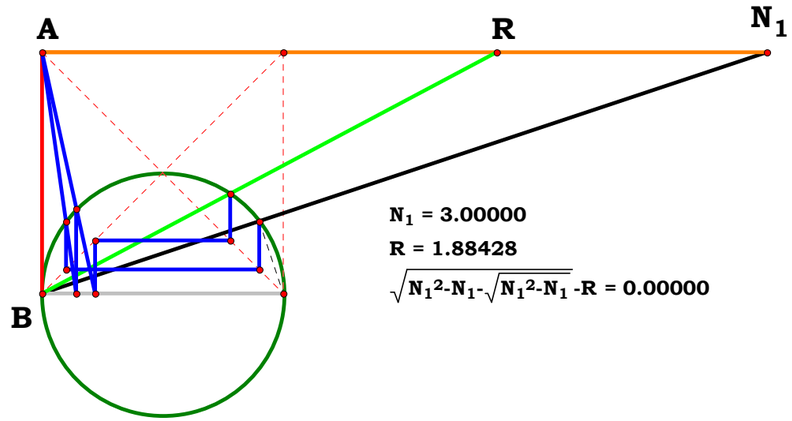
$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BE := \frac{1}{N^2 - \sqrt{N^2} - \sqrt{N^2 - \sqrt{N^2}} + 1} \qquad BG := AB - BE$$

$$DE := \frac{\sqrt{N^2 - \sqrt{N^2} - \sqrt{N^2 - \sqrt{N^2}}}}{N^2 - \sqrt{N^2} - \sqrt{N^2 - \sqrt{N^2}} + 1} \qquad R := \frac{BG \cdot AB}{DE}$$

$R = 1.213496$



Definitions.

$$R - \sqrt{N^2 - N - \sqrt{N^2 - N}} = 0$$

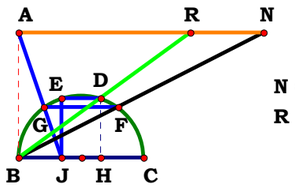
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{N_u^{\,2} - A \cdot N_u - A \cdot \sqrt{N_u^{\,2} - A \cdot N_u}}}{A} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Z^2 - q \cdot \sqrt{Z^2 - Z \cdot q} - Z \cdot q}}{q} = 0$$

3OBT1R9



N = 1.95960
R = 1.37128

Unit. $AB := 1$ Given. $N := 1.95960$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BJ := \frac{1}{N^2 - \sqrt{N^2} + 1} \qquad BH := AB - BJ$$

$$EJ := \frac{\sqrt{N^2 - \sqrt{N^2}}}{N^2 - \sqrt{N^2} + 1} \qquad R := \frac{BH \cdot AB}{EJ}$$

$R = 1.371289$

Definitions.

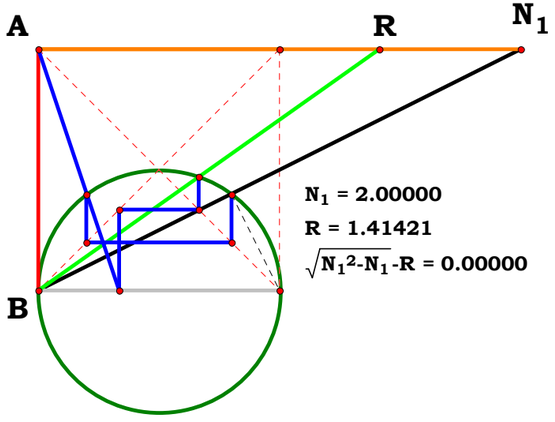
$$R - \sqrt{N^2 - N} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{N_u \cdot (N_u - A)}}{A} = 0$$

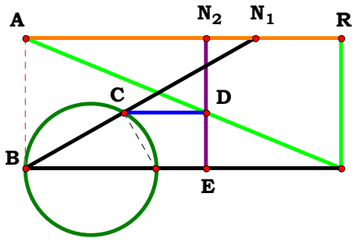
$$N - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Z \cdot (Z - q)}}{q} = 0$$



$N_1 = 2.00000$
$R = 1.41421$
$\sqrt{N_1^2 - N_1} - R = 0.00000$

3OBT1R10



$N_1 = 1.76022$
$N_2 = 1.38247$
$R = 2.42323$

Unit. $AB := 1$ **Given.** $N_1 := 1.76022$ $N_2 := 1.38247$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BC := \frac{AB \cdot N_1}{BN_1}$$

$$DN_2 := AB - \frac{BC}{BN_1} \qquad R := \frac{N_2}{DN_2}$$

$R = 2.423227$

Definitions.

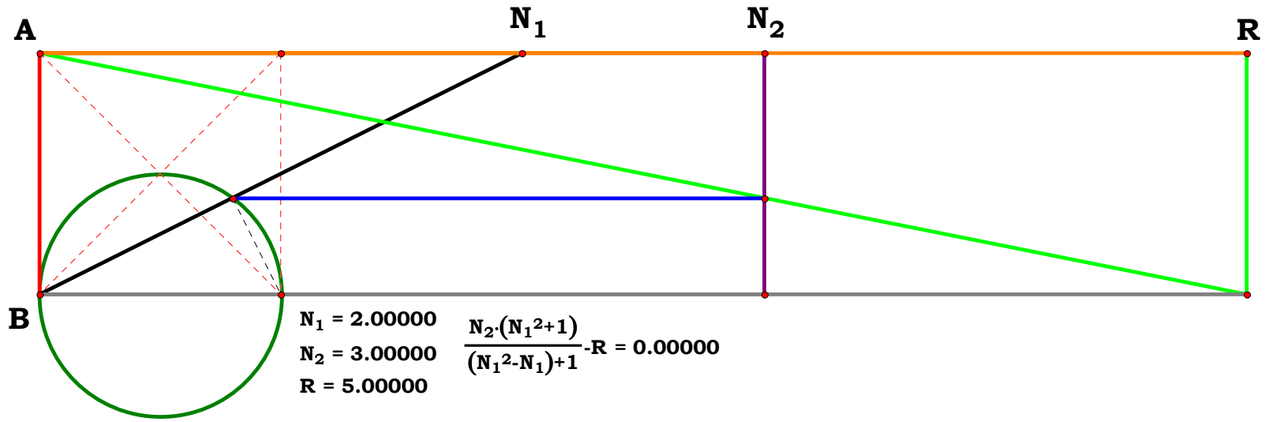
$$R - \frac{N_2 \cdot \left(N_1^2 + 1\right)}{N_1^2 - N_1 + 1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

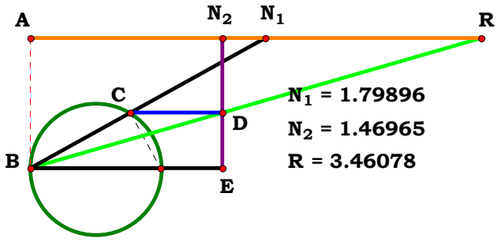
$$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{q \cdot \left(Y^2 - Y \cdot p + p^2\right)} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 5.00000$

$\frac{N_2 \cdot (N_1^2+1)}{(N_1^2-N_1)+1} - R = 0.00000$

3OBT1R11



Unit. $AB := 1$ Given. $N_1 := 1.79896$ $N_2 := 1.46965$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BC := \frac{N_1}{BN_1}$

$DE := \frac{BC}{BN_1}$ $R := \frac{N_2}{DE}$

$R = 3.460786$

Definitions.

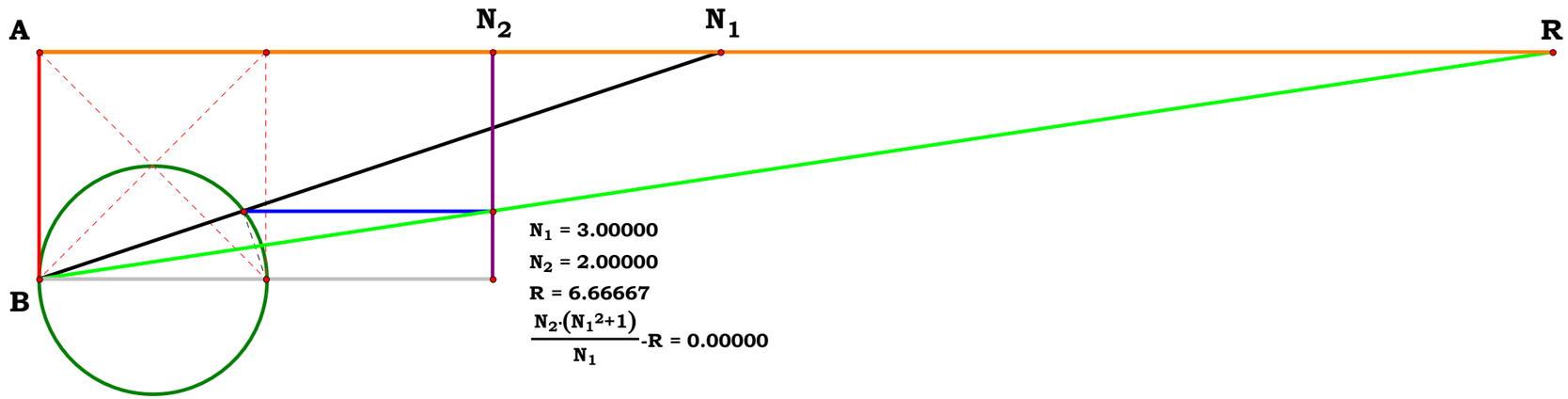
$R - \frac{N_2 \cdot \left(N_1^2 + 1\right)}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

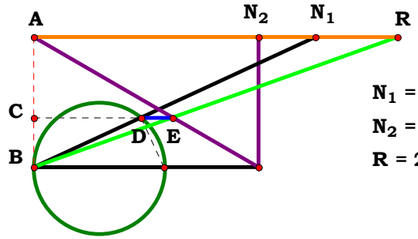
$R - \frac{A^2 + N_u^2}{A \cdot B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{Y \cdot p \cdot q} = 0$



3OBT1R12



$N_1 = 2.15734$
$N_2 = 1.72148$
$R = 2.79029$

Unit. $AB := 1$ **Given.** $N_1 := 2.15734$ $N_2 := 1.72148$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1}{BN_1}$

$BC := \frac{BD}{BN_1}$ $CE := N_2 \cdot (AB - BC)$

$R := \frac{CE}{BC}$ $R = 2.790302$

Definitions.

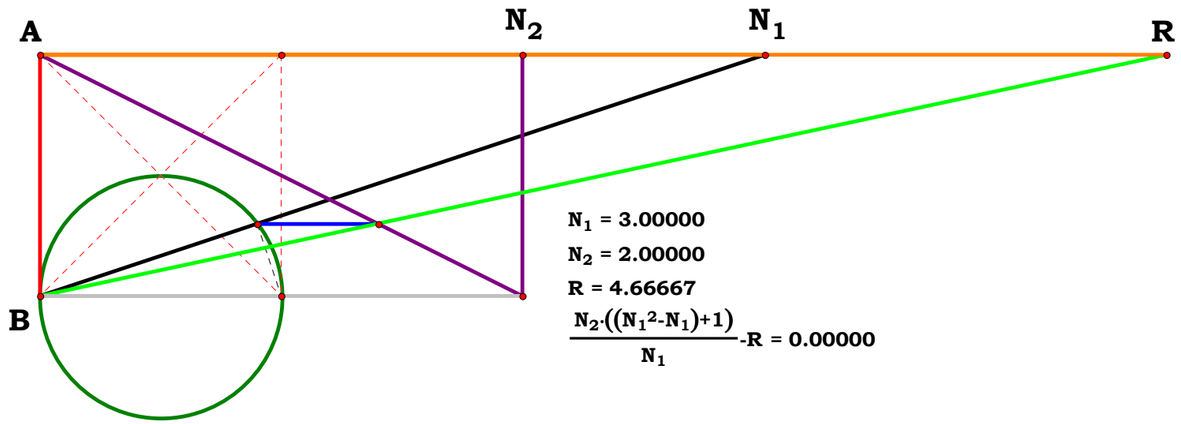
$$R - \frac{N_2 \cdot \left(N_1^2 - N_1 + 1\right)}{N_1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A^2 - A \cdot N_u + N_u^2}{A \cdot B} = 0$$

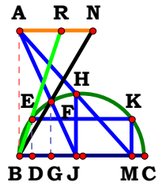
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 - Y \cdot p + p^2\right)}{Y \cdot p \cdot q} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$R = 4.66667$
$\frac{N_2 \cdot ((N_1^2 - N_1) + 1)}{N_1} - R = 0.00000$

3OBT1R13



N = 0.58586
R = 0.32886

Unit. $AB := 1$ Given. $N := .58586$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$FG := \frac{N}{N^2 + 1}$ $BG := \frac{N \cdot FG}{AB}$

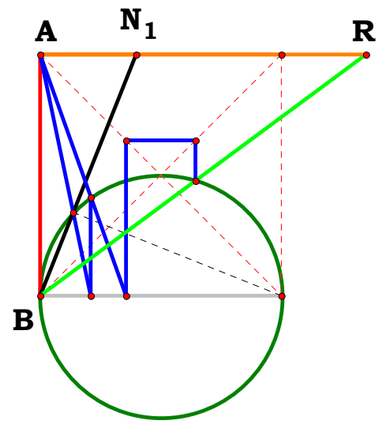
$BJ := \frac{BG \cdot AB}{AB - FG}$ $CJ := AB - BJ$

$HJ := \sqrt{BJ \cdot CJ}$ $BM := \frac{BJ \cdot AB}{AB - HJ}$

$CM := AB - BM$ $KM := \sqrt{BM \cdot CM}$

$BD := CM$ $DE := KM$

$R := \frac{BD \cdot AB}{DE}$ $R = 0.328848$



$N_1 = 0.40000$

$R = 1.34667$

$\frac{\sqrt{1-N_1 \cdot \sqrt{1-N_1} - N_1}}{N_1} - R = 0.00000$

Definitions.

$R - \frac{\sqrt{1 - N \cdot \sqrt{1 - N} - N}}{N} = 0$

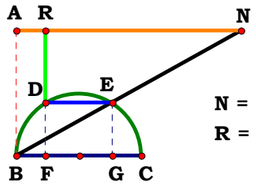
$N - \frac{N_u}{A} = 0$

$R - \frac{\sqrt{A^2 - A \cdot N_u - N_u \cdot \sqrt{A \cdot (A - N_u)}}}{N_u} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q \cdot \sqrt{q^{\frac{3}{2}} - Z \cdot \sqrt{q} - Z \cdot \sqrt{q - Z}}}{Z \cdot \sqrt{q^{\frac{3}{2}}}} = 0$

3OBT1R14



N = 1.79798
R = 0.23625

Unit. $AB := 1$ **Given.** $N := 1.79798$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$CG := \frac{1}{N^2 + 1}$ $BF := CG$

$R := BF$ $R = 0.236254$

Definitions.

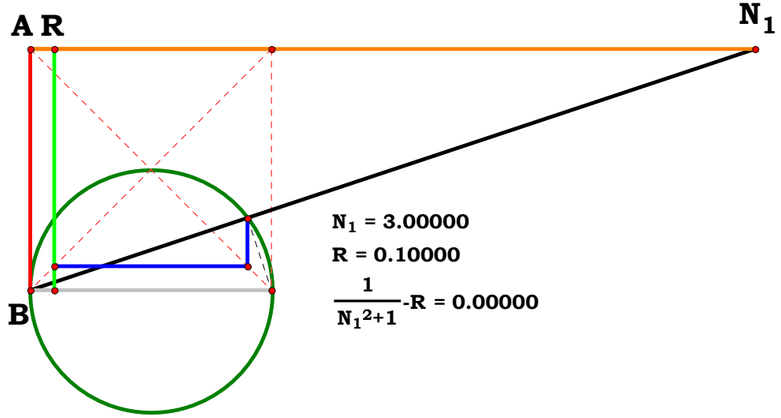
$R - \frac{1}{N^2 + 1} = 0$

$N - \frac{N_u}{A} = 0$

$R - \frac{A^2}{A^2 + N_u{}^2} = 0$

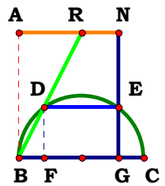
$N - \frac{Z}{q} = 0$

$R - \frac{q^2}{Z^2 + q^2} = 0$



$N_1 = 3.00000$
$R = 0.10000$
$\frac{1}{N_1{}^2+1} - R = 0.00000$

3OBT1R15



R = 0.79798
R = 0.50315

Unit. $AB := 1$ Given. $N := .79798$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

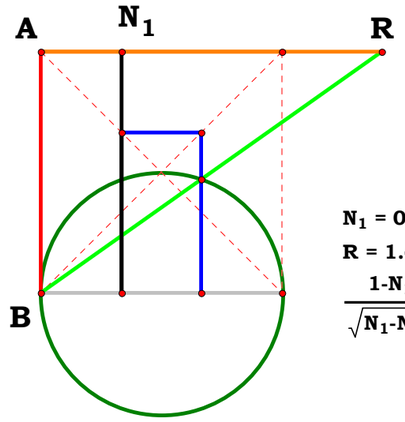
Descriptions.

$BG := N$ $CG := AB - N$

$EG := \sqrt{BG \cdot CG}$ $BF := CG$

$DF := EG$ $R := \frac{BF \cdot AB}{DF}$

$R = 0.503154$



$N_1 = 0.33333$
$R = 1.41421$
$\frac{1-N_1}{\sqrt{N_1-N_1^2}} - R = 0.00000$

Definitions.

$$R - \frac{1 - N}{\sqrt{N - N^2}} = 0$$

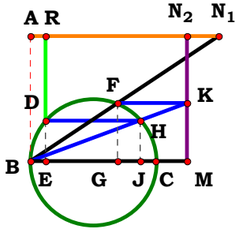
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A - N_u}{\sqrt{N_u \cdot (A - N_u)}} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{(q - Z)}{\sqrt{Z \cdot q - Z^2}} = 0$$

3OBT02R0



$N_1 = 1.50505$
$N_2 = 1.25253$
$R = 0.11928$

Unit. $AB := 1$ Given. $N_1 := 1.50505$ $N_2 := 1.25253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BF := \frac{N_1 \cdot AB}{BN_1}$

$FG := \frac{AB \cdot BF}{BN_1}$ $BK := \sqrt{FG^2 + N_2^2}$

$BH := \frac{N_2 \cdot AB}{BK}$ $BJ := \frac{N_2 \cdot BH}{BK}$

$R := AB - BJ$ $R = 0.119276$

Definitions.

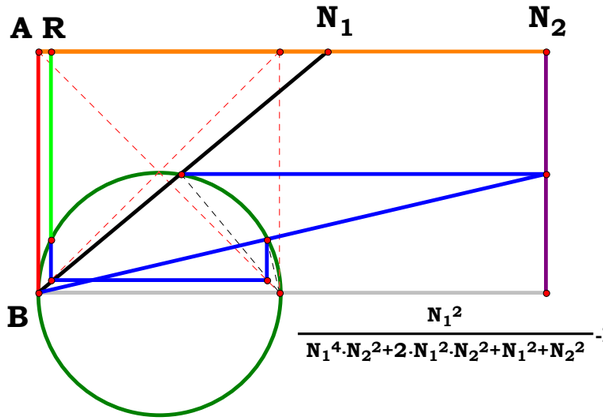
$$R - \frac{N_1^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A^2 \cdot B^2}{A^4 + A^2 \cdot B^2 + N_u^2 \cdot \left(2 \cdot A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

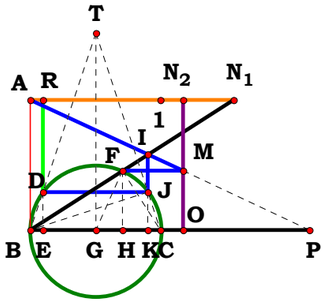
$$R - \frac{Y^2 \cdot p^2 \cdot q^2}{Y^4 \cdot Z^2 + 2 \cdot Y^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot p^2 \cdot q^2 + Z^2 \cdot p^4} = 0$$



$N_1 = 1.20000$
$N_2 = 2.10000$
$R = 0.05199$

$$\frac{N_1^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} - R = 0.00000$$

3OBT2R1



$N_1 = 1.55688$

$N_2 = 1.16939$

$R = 0.09797$

Unit. $AB := 1$ **Given.** $N_1 := 1.55688$ $N_2 := 1.16939$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BN_1 := \sqrt{N_1^{\,2} + AB^2} \qquad BF := \frac{N_1 \cdot AB}{BN_1}$$

$$FH := \frac{AB \cdot BF}{BN_1} \qquad BP := \frac{N_2 \cdot AB}{AB - FH}$$

$$BK := \frac{N_1 \cdot BP}{N_1 + BP} \qquad R := (1 - BK)$$

$R = 0.09797$

Definitions.

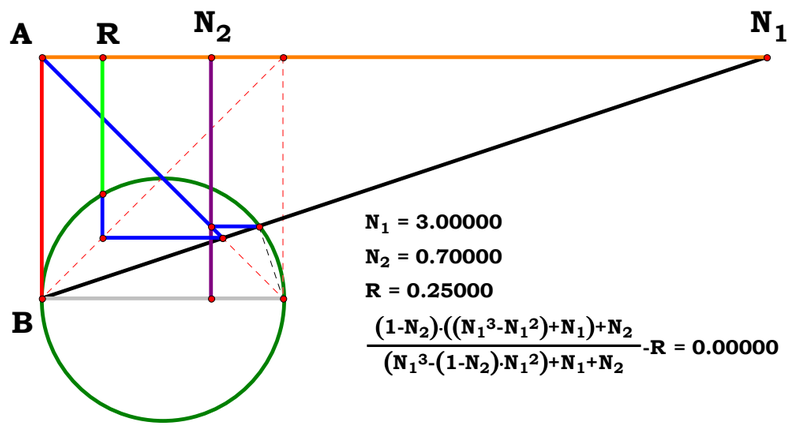
$$R - \frac{\left(1 - N_2\right) \cdot \left(N_1^{\,3} - N_1^{\,2} + N_1\right) + N_2}{N_1^{\,3} - \left(1 - N_2\right) \cdot N_1^{\,2} + N_1 + N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{(A + B) \cdot N_u^{\,2} - N_u^{\,3} + A \cdot \left(A - N_u\right) \cdot (A + B)}{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) + A \cdot \left(A^2 + N_u^{\,2}\right)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (p - Y) \cdot \left(Y^2 + p^2\right) + Y \cdot q \cdot \left(Y^2 - Y \cdot p + p^2\right)}{q \cdot Y^3 + Y^2 \cdot p \cdot (Z - q) + p^2 \cdot (Y \cdot q + Z \cdot p)} = 0$$



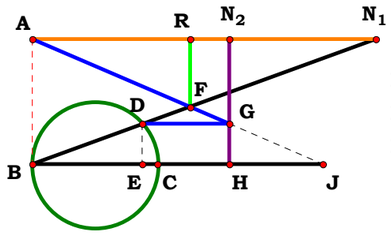
$N_1 = 3.00000$

$N_2 = 0.70000$

$R = 0.25000$

$$\frac{(1-N_2)\cdot((N_1{}^3-N_1{}^2)+N_1)+N_2}{(N_1{}^3-(1-N_2)\cdot N_1{}^2)+N_1+N_2} - R = 0.00000$$

3OBT02R2



$N_1 = 2.74747$

$N_2 = 1.57576$

$R = 1.25846$

Unit. $AB := 1$ **Given.** $N_1 := 2.74747$ $N_2 := 1.57576$

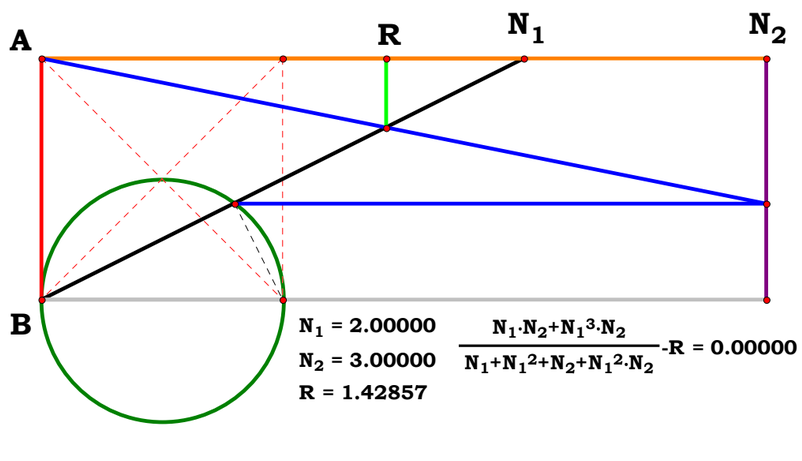
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BJ := \frac{N_2 \cdot AB}{AB - DE}$

$R := \frac{N_1 \cdot BJ}{N_1 + BJ}$ $R = 1.258457$



$N_1 = 2.00000$

$N_2 = 3.00000$

$R = 1.42857$

$\frac{N_1 \cdot N_2 + N_1^3 \cdot N_2}{N_1 + N_1^2 + N_2 + N_1^2 \cdot N_2} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_2 + N_1^3 \cdot N_2}{N_1 + N_1^3 - N_1^2 + N_2 + N_1^2 \cdot N_2} = 0$$

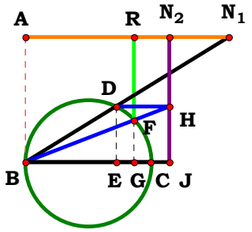
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\left(A^2 + N_u^2\right) \cdot (A + B) - A \cdot B \cdot N_u} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot \left(Y^2 + p^2\right)}{Z \cdot p^3 + Y^3 \cdot q + Y^2 \cdot Z \cdot p + Y \cdot p^2 \cdot q - Y^2 \cdot p \cdot q} = 0$$

3OBT2R3



$N_1 = 1.62626$

$N_2 = 1.15152$

$R = 0.86946$

Unit. $AB := 1$ Given. $N_1 := 1.62626$ $N_2 := 1.15152$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

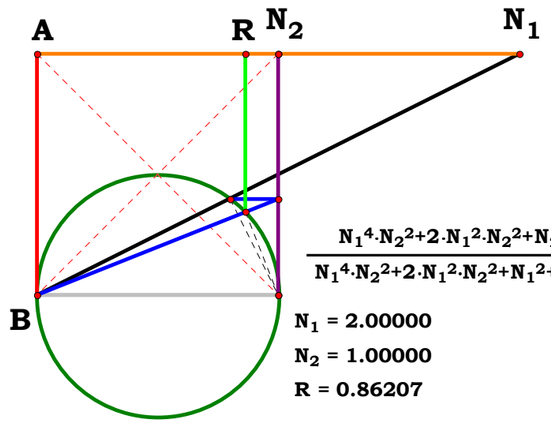
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BH := \sqrt{N_2^2 + DE^2}$

$BF := \frac{N_2 \cdot AB}{BH}$ $R := \frac{N_2 \cdot BF}{BH}$

$R = 0.869456$



$\frac{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_2^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} - R = 0.00000$

$N_1 = 2.00000$

$N_2 = 1.00000$

$R = 0.86207$

Definitions.

$$R - \frac{N_2^2 \cdot \left(N_1^2 + 1\right)^2}{N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2} = 0$$

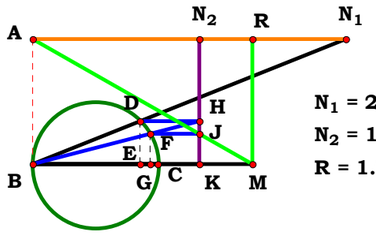
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\left(A^2 + N_u^2\right)^2}{A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u^2 + N_u^4} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z^2 \cdot \left(Y^2 + p^2\right)^2}{Y^4 \cdot Z^2 + 2 \cdot Y^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot p^2 \cdot q^2 + Z^2 \cdot p^4} = 0$$

3OBT2R4



$N_1 = 2.50505$
$N_2 = 1.33333$
$R = 1.75924$

Unit. $AB := 1$ Given. $N_1 := 2.50505$ $N_2 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

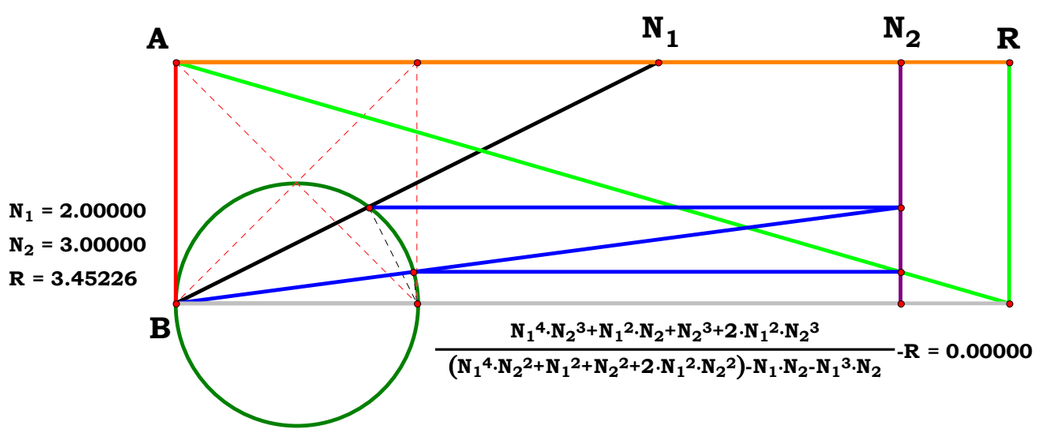
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BH := \sqrt{DE^2 + N_2^2}$

$BF := \frac{N_2 \cdot AB}{BH}$ $FG := \frac{DE \cdot BF}{BH}$

$R := \frac{N_2 \cdot AB}{AB - FG}$ $R = 1.759238$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 3.45226$

$$\frac{N_1^4 \cdot N_2^3 + N_1^2 \cdot N_2 + N_2^3 + 2 \cdot N_1^2 \cdot N_2^3}{\left(N_1^4 \cdot N_2^2 + N_1^2 + N_2^2 + 2 \cdot N_1^2 \cdot N_2^2\right) - N_1 \cdot N_2 - N_1^3 \cdot N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot \left(N_1^4 \cdot N_2^2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 + N_2^2\right)}{N_1^4 \cdot N_2^2 - N_1^3 \cdot N_2 + 2 \cdot N_1^2 \cdot N_2^2 + N_1^2 - N_1 \cdot N_2 + N_2^2} = 0$$

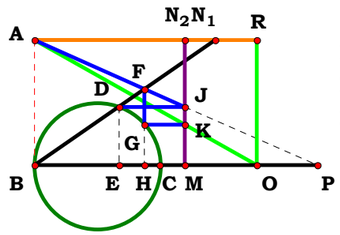
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A^2 \cdot N_u \cdot \left(A^2 + B^2\right) + N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right)}{A^2 \cdot B^3 + B \cdot \left(A^2 + N_u^2\right) \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^4 \cdot Z^3 + 2 \cdot Y^2 \cdot Z^3 \cdot p^2 + Y^2 \cdot Z \cdot p^2 \cdot q^2 + Z^3 \cdot p^4}{Y^4 \cdot Z^2 \cdot q - Y^3 \cdot Z \cdot p \cdot q^2 + 2 \cdot Y^2 \cdot Z^2 \cdot p^2 \cdot q + Y^2 \cdot p^2 \cdot q^3 - Y \cdot Z \cdot p^3 \cdot q^2 + Z^2 \cdot p^4 \cdot q} = 0$$

3OBT2R5



$N_1 = 1.44444$

$N_2 = 1.20202$

$R = 1.77715$

Unit. $AB := 1$ **Given.** $N_1 := 1.44444$ $N_2 := 1.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

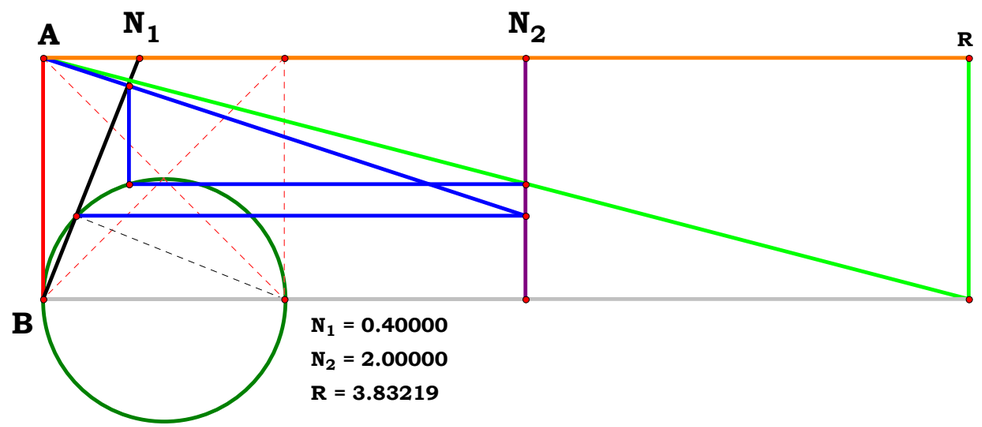
Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BD := \frac{N_1 \cdot AB}{BN_1}$$

$$DE := \frac{AB \cdot BD}{BN_1} \qquad BP := \frac{N_2 \cdot AB}{AB - DE}$$

$$BH := \frac{N_1 \cdot BP}{N_1 + BP} \qquad GH := \sqrt{BH \cdot (AB - BH)}$$

$$R := \frac{N_2 \cdot AB}{AB - GH} \qquad R = 1.777157$$



$N_1 = 0.40000$

$N_2 = 2.00000$

$R = 3.83219$

$$\frac{N_2 \cdot (((N_1 + N_2 + N_1^2 \cdot N_2) - N_1^2) + N_1^3)}{(((N_1 + N_2 + N_1^2 \cdot N_2) - N_1^2) + N_1^3) - \sqrt{N_1 \cdot N_2 \cdot (N_1^2 + 1) \cdot ((((N_1 + N_2 + N_1^2 \cdot N_2) - N_1^3 \cdot N_2 - N_1^2) + N_1^3) - N_1 \cdot N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot \left(N_1 + N_2 + N_1^2 \cdot N_2 - N_1^2 + N_1^3\right)}{N_1 + N_2 + N_1^2 \cdot N_2 - N_1^2 + N_1^3 - \sqrt{N_1 \cdot N_2 \cdot \left(N_1^2 + 1\right) \cdot \left(N_1 + N_2 + N_1^2 \cdot N_2 - N_1^3 \cdot N_2 - N_1^2 + N_1^3 - N_1 \cdot N_2\right)}} = 0$$

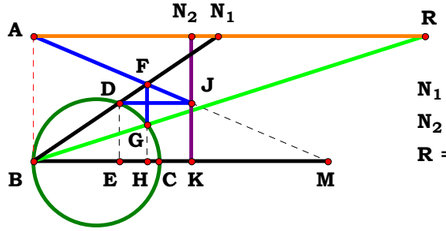
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{B \cdot \left[A \cdot N_u^3 - \sqrt{N_u^3 \cdot (A + B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + N_u \cdot \left[A^3 + B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]\right]} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot \left(Z \cdot p^3 + Y^3 \cdot q + Y^2 \cdot Z \cdot p + Y \cdot p^2 \cdot q - Y^2 \cdot p \cdot q\right)}{q \cdot \left[Z \cdot p^3 - \sqrt{Y \cdot Z \cdot \left(Y^2 + p^2\right) \cdot \left(Z \cdot p^3 - Y^3 \cdot Z + Y^3 \cdot q - Y \cdot Z \cdot p^2 + Y^2 \cdot Z \cdot p + Y \cdot p^2 \cdot q - Y^2 \cdot p \cdot q\right)} + Y^3 \cdot q + Y^2 \cdot Z \cdot p + Y \cdot p^2 \cdot q - Y^2 \cdot p \cdot q\right]} = 0$$

3OBT2R6



$N_1 = 1.47475$
$N_2 = 1.26263$
$R = 3.12814$

Unit. $AB := 1$ Given. $N_1 := 1.47475$ $N_2 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

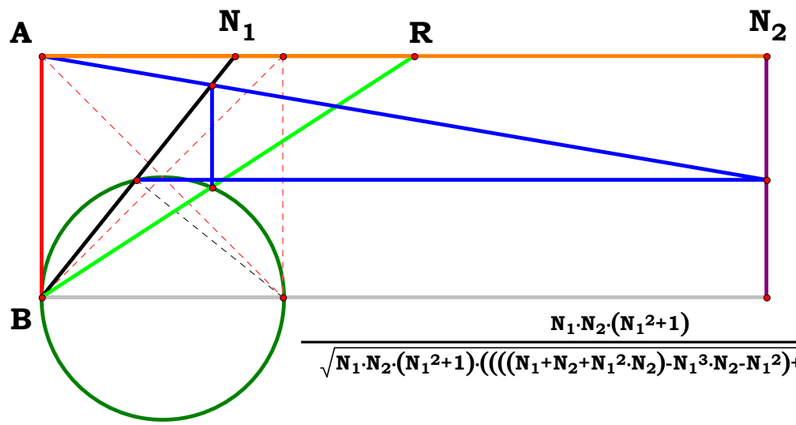
Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BD := \frac{N_1 \cdot AB}{BN_1}$$

$$DE := \frac{AB \cdot BD}{BN_1} \qquad BM := \frac{N_2 \cdot AB}{AB - DE}$$

$$BH := \frac{N_1 \cdot BM}{N_1 + BM} \qquad GH := \sqrt{BH \cdot (AB - BH)}$$

$$R := \frac{BH \cdot AB}{GH} \qquad R = 3.128177$$



$N_1 = 0.80000$
$N_2 = 3.00000$
$R = 1.54169$

$$\frac{N_1 \cdot N_2 \cdot (N_1^2+1)}{\sqrt{N_1 \cdot N_2 \cdot (N_1^2+1) \cdot ((((N_1+N_2+N_1^2 \cdot N_2)-N_1^3 \cdot N_2-N_1^2)+N_1^3)-N_1 \cdot N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot \left(N_1^2 + 1\right)}{\sqrt{N_1 \cdot N_2 \cdot \left(N_1^2 + 1\right) \cdot \left(N_1 + N_2 + N_1^2 \cdot N_2 - N_1^3 \cdot N_2 - N_1^2 + N_1^3 - N_1 \cdot N_2\right)}} = 0$$

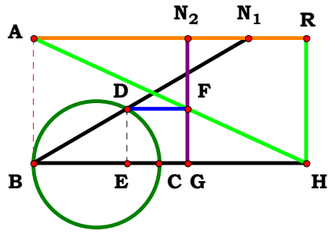
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[\left(A^2 - A \cdot N_u + N_u^2\right) \cdot (A + B) - N_u^3\right]}} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot Z \cdot \left(Y^2 + p^2\right)}{\sqrt{Y \cdot Z \cdot \left(Y^2 + p^2\right) \cdot \left(Z \cdot p^3 - Y^3 \cdot Z + Y^3 \cdot q - Y \cdot Z \cdot p^2 + Y^2 \cdot Z \cdot p + Y \cdot p^2 \cdot q - Y^2 \cdot p \cdot q\right)}} = 0$$

3OBT2R7



$N_1 = 1.71717$
$N_2 = 1.23232$
$R = 2.18061$

Unit. $AB := 1$ Given. $N_1 := 1.71717$ $N_2 := 1.23232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $R := \frac{N_2 \cdot AB}{AB - DE}$

$R = 2.180606$

Definitions.

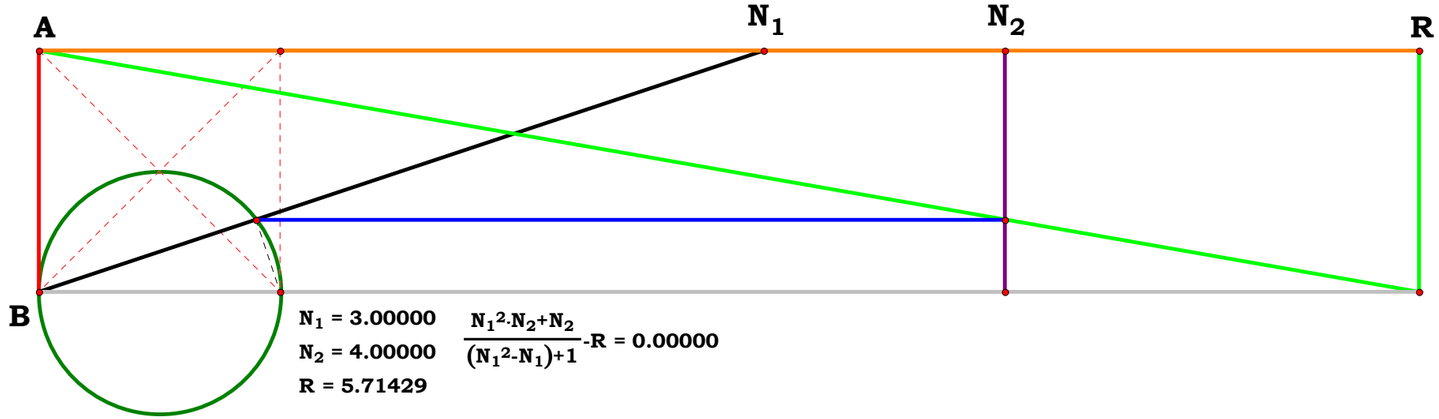
$$R - \frac{N_1^2 \cdot N_2 + N_2}{N_1^2 - N_1 + 1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2\right)}{B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)} = 0$$

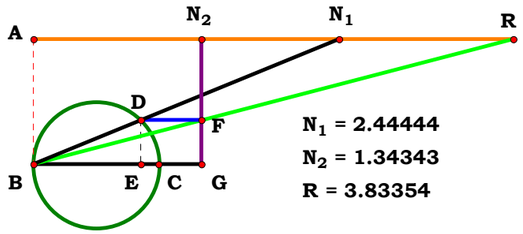
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{q \cdot \left(Y^2 - Y \cdot p + p^2\right)} = 0$$



$N_1 = 3.00000$ $\frac{N_1^2 \cdot N_2 + N_2}{(N_1^2 - N_1) + 1} - R = 0.00000$
$N_2 = 4.00000$
$R = 5.71429$

3OBT2R8



Unit. $AB := 1$ **Given.** $N_1 := 2.44444$ $N_2 := 1.34343$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $R := \frac{N_2 \cdot AB}{DE}$

$R = 3.83352$

Definitions.

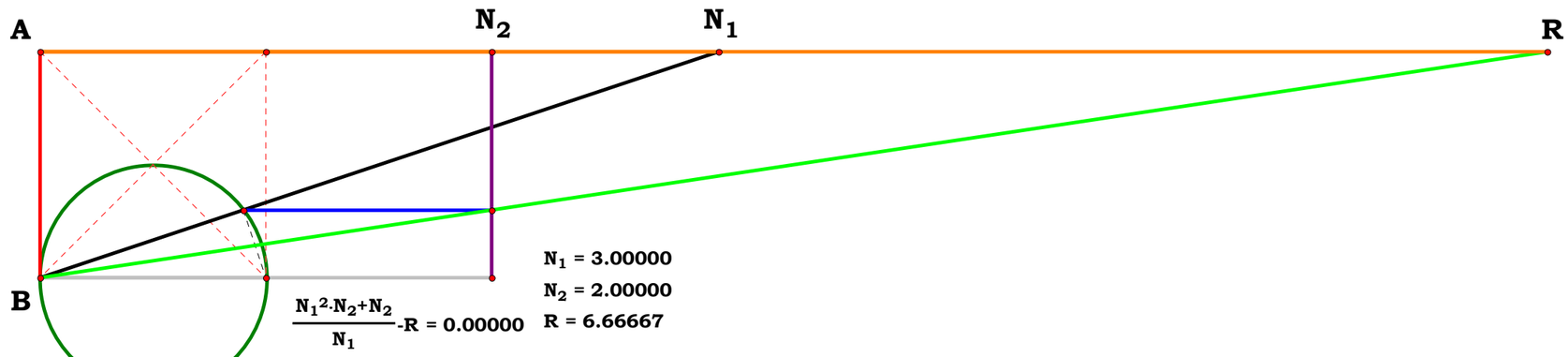
$$R - \frac{N_1^2 \cdot N_2 + N_2}{N_1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

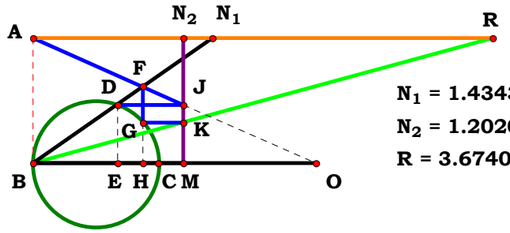
$$R - \frac{A^2 + N_u^2}{A \cdot B} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 + p^2\right)}{Y \cdot p \cdot q} = 0$$



3OBT2R9



$N_1 = 1.43434$
$N_2 = 1.20202$
$R = 3.67405$

Unit. $AB := 1$ **Given.** $N_1 := 1.43434$ $N_2 := 1.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

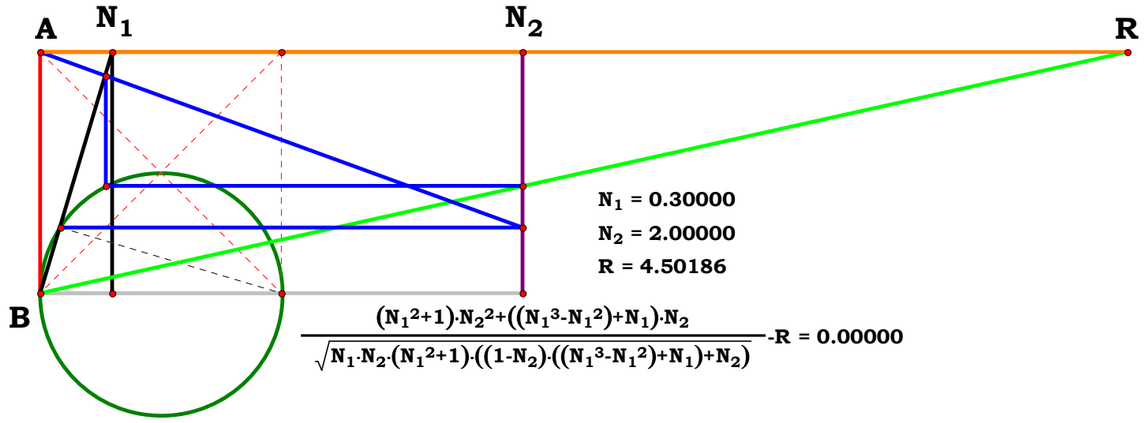
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BO := \frac{N_2 \cdot AB}{AB - DE}$

$BH := \frac{N_1 \cdot BO}{N_1 + BO}$ $GH := \sqrt{BH \cdot (AB - BH)}$

$R := \frac{N_2 \cdot AB}{GH}$ $R = 3.674031$



$N_1 = 0.30000$
$N_2 = 2.00000$
$R = 4.50186$

$$\frac{(N_1^2+1)\cdot N_2^2+((N_1^3-N_1^2)+N_1)\cdot N_2}{\sqrt{N_1\cdot N_2\cdot(N_1^2+1)\cdot((1-N_2)\cdot((N_1^3-N_1^2)+N_1)+N_2)}}-R = 0.00000$$

Definitions.

$$R - \frac{\left(N_1^2+1\right)\cdot N_2^2+\left(N_1^3-N_1^2+N_1\right)\cdot N_2}{\sqrt{N_1\cdot N_2\cdot\left(N_1^2+1\right)\cdot\left[\left(1-N_2\right)\cdot\left(N_1^3-N_1^2+N_1\right)+N_2\right]}} = 0$$

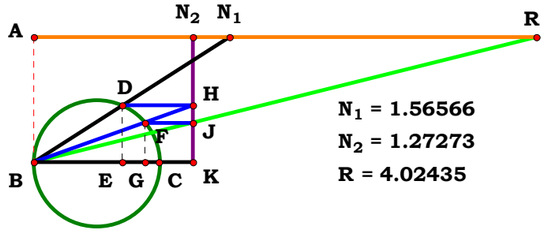
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u^2\cdot\left(A^3+B\cdot A^2+A\cdot N_u^2-B\cdot A\cdot N_u+B\cdot N_u^2\right)}{B\cdot\sqrt{N_u^3\cdot\left(A^2+N_u^2\right)\cdot\left[A^3+\left(A^2-A\cdot N_u+N_u^2\right)\cdot\left(B-N_u\right)\right]}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z\cdot\left(Z\cdot p^3+Y^3\cdot q+Y^2\cdot Z\cdot p+Y\cdot p^2\cdot q-Y^2\cdot p\cdot q\right)}{q\cdot\sqrt{Y\cdot Z\cdot\left(Y^2+p^2\right)\cdot\left(Z\cdot p^3-Y^3\cdot Z+Y^3\cdot q-Y\cdot Z\cdot p^2+Y^2\cdot Z\cdot p+Y\cdot p^2\cdot q-Y^2\cdot p\cdot q\right)}} = 0$$

3OBT02R10



Unit. $AB := 1$ Given. $N_1 := 1.56566$ $N_2 := 1.27273$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

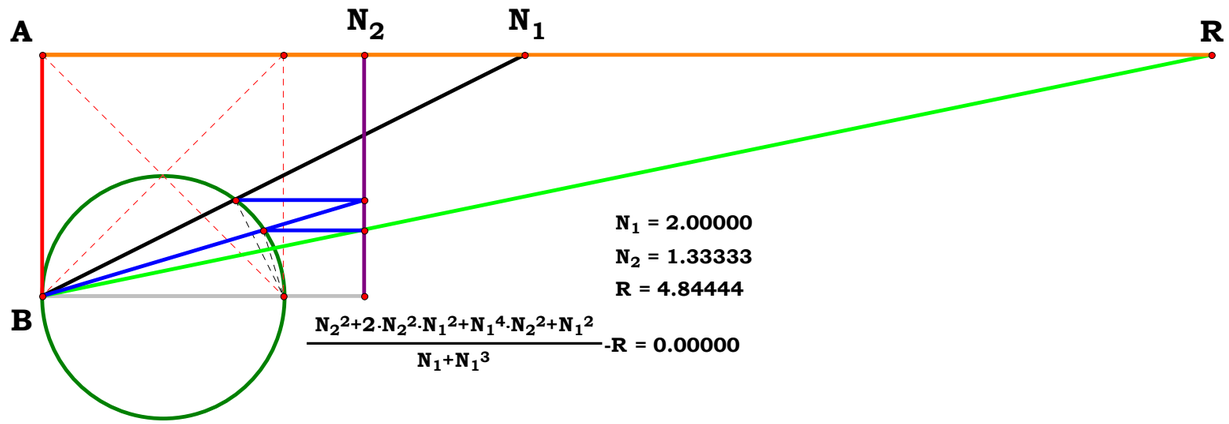
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BH := \sqrt{N_2^2 + DE^2}$

$BF := \frac{N_2 \cdot AB}{BH}$ $FG := \frac{DE \cdot BF}{BH}$

$R := \frac{N_2 \cdot AB}{FG}$ $R = 4.024372$



Definitions.

$$R - \frac{N_1^2 \cdot N_2^2 \cdot \left(N_1^2 + 2\right) + N_1^2 + N_2^2}{N_1 \cdot \left(N_1^2 + 1\right)} = 0$$

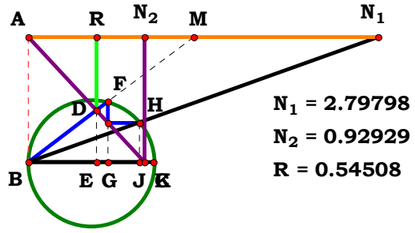
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right) + N_u \cdot A^2 \cdot \left(A^2 + B^2\right)}{A \cdot B^2 \cdot \left(A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^4 \cdot Z^2 + 2 \cdot Y^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot p^2 \cdot q^2 + Z^2 \cdot p^4}{Y \cdot p \cdot q^2 \cdot \left(Y^2 + p^2\right)} = 0$$

3OBT3R0



$N_1 = 2.79798$
$N_2 = 0.92929$
$R = 0.54508$

Unit. $AB := 1$ Given. $N_1 := 2.79798$ $N_2 := .92929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

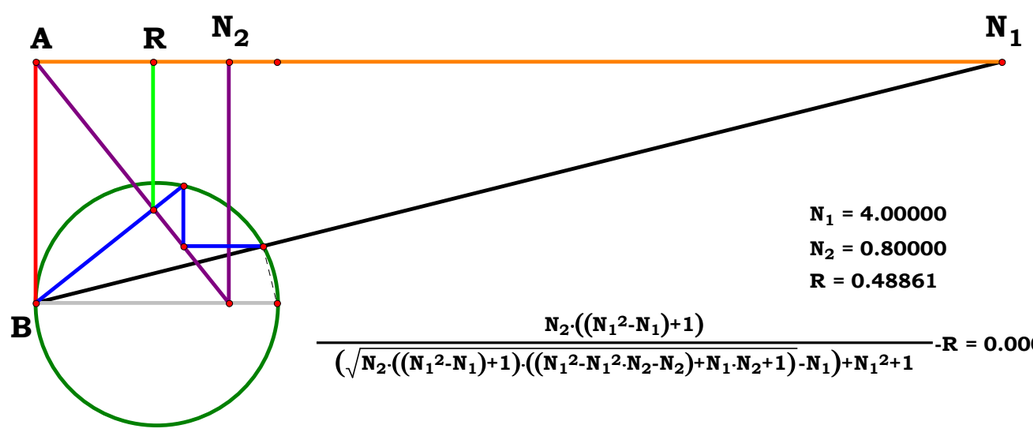
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BH := \frac{N_1 \cdot AB}{BN_1}$

$HJ := \frac{AB \cdot BH}{BN_1}$ $JK := \frac{N_2 \cdot HJ}{AB}$

$BG := N_2 - JK$ $FG := \sqrt{BG \cdot (AB - BG)}$

$AM := \frac{BG \cdot AB}{FG}$ $R := \frac{AM \cdot N_2}{AM + N_2}$

$R = 0.545076$



$N_1 = 4.00000$
$N_2 = 0.80000$
$R = 0.48861$

$$\frac{N_2 \cdot ((N_1^2 - N_1) + 1)}{\left(\sqrt{N_2 \cdot ((N_1^2 - N_1) + 1) \cdot ((N_1^2 - N_1^2 \cdot N_2 - N_2) + N_1 \cdot N_2 + 1)} - N_1\right) + N_1^2 + 1} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot \left(N_1^2 - N_1 + 1\right)}{\sqrt{N_2 \cdot \left(N_1^2 - N_1 + 1\right) \cdot \left(N_1^2 - N_1^2 \cdot N_2 - N_2 + N_1 \cdot N_2 + 1\right)} - N_1 + N_1^2 + 1} = 0$$

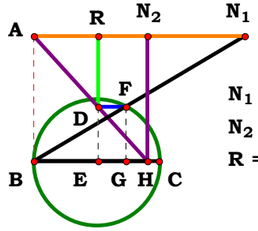
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left[\left(B - N_u\right) \cdot A^2 + N_u^2 \cdot \left(A + B - N_u\right)\right]} + B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 - Y \cdot p + p^2\right)}{Y^2 \cdot q + p^2 \cdot q + \sqrt{Z \cdot \left(Y^2 - Y \cdot p + p^2\right) \cdot \left(Y^2 \cdot q - Z \cdot p^2 - Y^2 \cdot Z + p^2 \cdot q + Y \cdot Z \cdot p\right)} - Y \cdot p \cdot q} = 0$$

3OBT3R1



$N_1 = 1.68687$
$N_2 = 0.90909$
$R = 0.51031$

Unit. $AB := 1$ Given. $N_1 := 1.68687$ $N_2 := .90909$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BF := \frac{N_1 \cdot AB}{BN_1}$

$FG := \frac{AB \cdot BF}{BN_1}$ $EH := \frac{N_2 \cdot FG}{AB}$

$R := N_2 - EH$ $R = 0.510311$

Definitions.

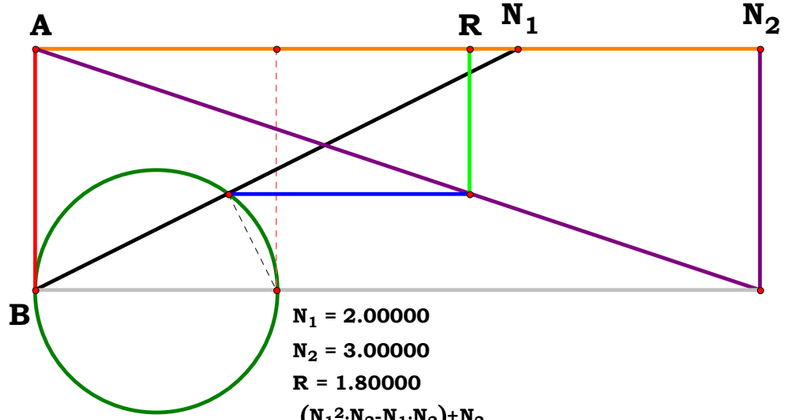
$$R - \frac{N_1^2 \cdot N_2 - N_1 \cdot N_2 + N_2}{1 + N_1^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{B \cdot \left(A^2 + N_u^2\right)} = 0$$

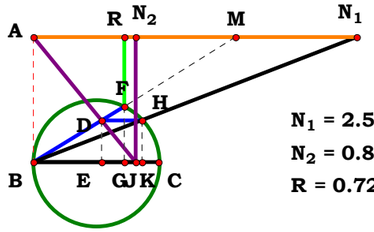
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 - Y \cdot p + p^2\right)}{q \cdot \left(Y^2 + p^2\right)} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 1.80000$
$\frac{(N_1^2 \cdot N_2 - N_1 \cdot N_2) + N_2}{1 + N_1^2} - R = 0.00000$

3OBT3R2



$N_1 = 2.58586$
$N_2 = 0.81818$
$R = 0.72259$

Unit. $AB := 1$ **Given.** $N_1 := 2.58586$ $N_2 := .81818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

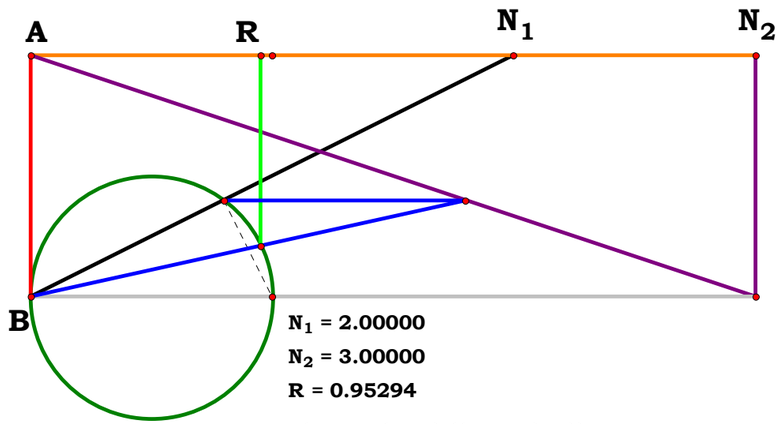
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BH := \frac{N_1 \cdot AB}{BN_1}$

$HK := \frac{AB \cdot BH}{BN_1}$ $EJ := \frac{N_2 \cdot HK}{AB}$

$BE := N_2 - EJ$ $AM := \frac{BE \cdot AB}{HK}$

$BM := \sqrt{AB^2 + AM^2}$ $BF := \frac{AM \cdot AB}{BM}$

$R := \frac{AM \cdot BF}{BM}$ $R = 0.722588$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 0.95294$

Definitions.

$$R - \frac{N_1 \cdot N_2^2 \cdot (N_1 - 1) \cdot (N_1^2 - N_1 + 2) + N_2^2}{N_1 \cdot N_2^2 \cdot (N_1 - 1) \cdot (N_1^2 - N_1 + 2) + N_1^2 + N_2^2} = 0$$

$$\frac{N_2^2+(N_1 \cdot N_2^2 \cdot (N_1-1) \cdot ((N_1^2-N_1)+2))}{N_1^2+N_2^2+(N_1 \cdot N_2^2 \cdot (N_1-1) \cdot ((N_1^2-N_1)+2))} - R = 0.00000$$

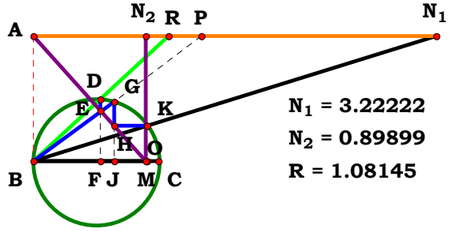
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{\left(A^2 - A \cdot N_u + N_u^2\right)^2}{A^2 \cdot B^2 + N_u^4 + A \cdot (A - N_u) \cdot \left(A^2 - A \cdot N_u + 2 \cdot N_u^2\right)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z^2 \cdot \left(Y^2 - Y \cdot p + p^2\right)^2}{Y^4 \cdot Z^2 - 2 \cdot Y^3 \cdot Z^2 \cdot p + 3 \cdot Y^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot p^2 \cdot q^2 - 2 \cdot Y \cdot Z^2 \cdot p^3 + Z^2 \cdot p^4} = 0$$

3OBT2R3



$N_1 = 3.22222$
$N_2 = 0.89899$
$R = 1.08145$

Unit. $AB := 1$ **Given.** $N_1 := 3.22222$ $N_2 := .89899$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BK := \frac{N_1 \cdot AB}{BN_1}$

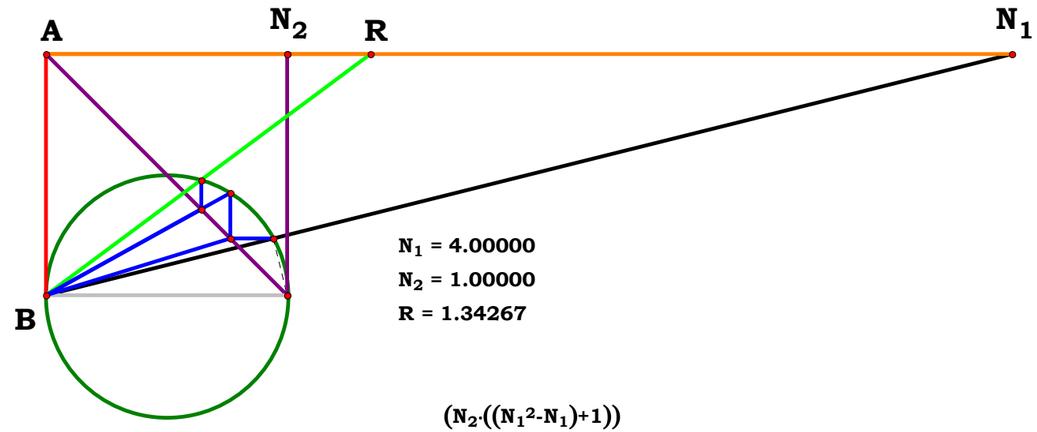
$KM := \frac{AB \cdot BK}{BN_1}$ $JO := \frac{N_2 \cdot KM}{AB}$

$BJ := N_2 - JO$ $GJ := \sqrt{BJ \cdot (AB - BJ)}$

$AP := \frac{BJ \cdot AB}{GJ}$ $BF := \frac{AP \cdot N_2}{AP + N_2}$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{DF}$

$R = 1.081448$



$N_1 = 4.00000$
$N_2 = 1.00000$
$R = 1.34267$

$$\frac{(N_2 \cdot ((N_1^2 - N_1) + 1))}{\sqrt{(N_2 \cdot ((N_1^2 - N_1) + 1)) \cdot \left(\left(\sqrt{(N_2 \cdot ((N_1^2 - N_1) + 1)) \cdot ((N_1^2 - N_1^2 \cdot N_2 - N_2) + N_1 \cdot N_2 + 1)} - N_2 - N_1^2 \cdot N_2 - N_1\right) + N_1^2 + N_1 \cdot N_2 + 1\right)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot \left(N_1^2 - N_1 + 1\right)}{\sqrt{N_2 \cdot \left(N_1^2 - N_1 + 1\right) \cdot \left[\sqrt{N_2 \cdot \left(N_1^2 - N_1 + 1\right) \cdot \left(N_1^2 - N_1^2 \cdot N_2 - N_2 + N_1 \cdot N_2 + 1\right)} - N_2 - N_1^2 \cdot N_2 - N_1 + N_1^2 + N_1 \cdot N_2 + 1\right]}} = 0$$

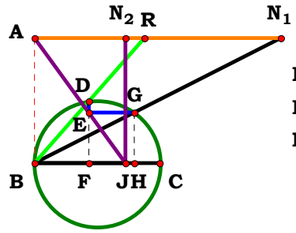
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(B \cdot A^2 - A^2 \cdot N_u + A \cdot N_u^2 - N_u^3 + B \cdot N_u^2\right)} + \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(B - N_u\right)\right]}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \left(Y^2 - Y \cdot p + p^2\right)}{\sqrt{Z \cdot \left(Y^2 - Y \cdot p + p^2\right) \cdot \left[Y^2 \cdot q - Z \cdot p^2 - Y^2 \cdot Z + p^2 \cdot q + \sqrt{Z \cdot \left(Y^2 - Y \cdot p + p^2\right) \cdot \left(Y^2 \cdot q - Z \cdot p^2 - Y^2 \cdot Z + p^2 \cdot q + Y \cdot Z \cdot p\right)} + Y \cdot Z \cdot p - Y \cdot p \cdot q\right]}} = 0$$

3OBT3R4



$N_1 = 1.96970$
$N_2 = 0.72727$
$R = 0.87514$

Unit. $AB := 1$ **Given.** $N_1 := 1.96970$ $N_2 := .72727$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

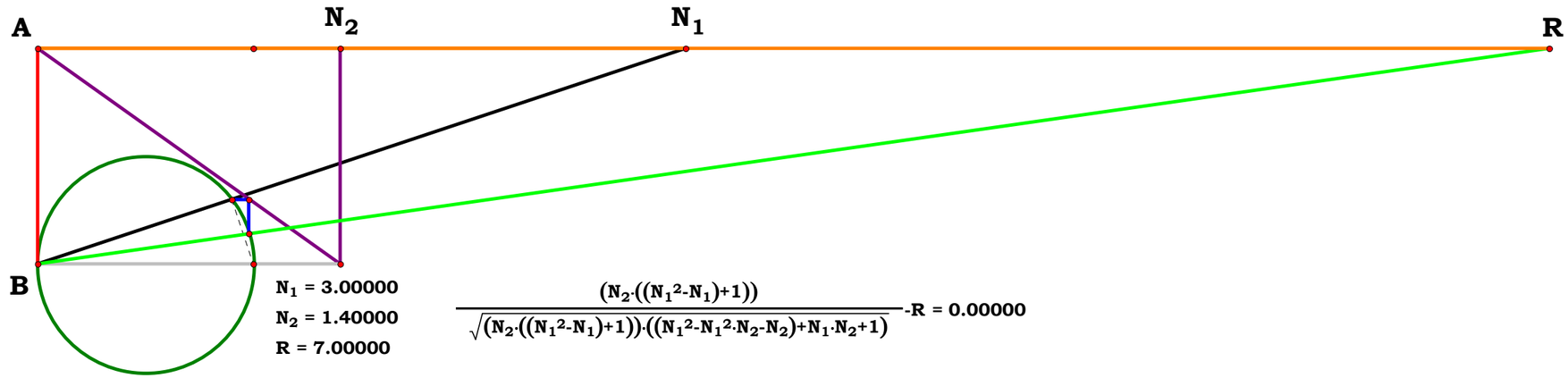
$GH := \frac{AB \cdot BG}{BN_1}$

$FJ := \frac{N_2 \cdot GH}{AB}$

$BF := N_2 - FJ$

$DF := \sqrt{BF \cdot (AB - BF)}$

$R := \frac{BF \cdot AB}{DF}$ $R = 0.875141$



$N_1 = 3.00000$
$N_2 = 1.40000$
$R = 7.00000$

$$\frac{(N_2 \cdot ((N_1^2 - N_1) + 1))}{\sqrt{(N_2 \cdot ((N_1^2 - N_1) + 1)) \cdot ((N_1^2 - N_1^2 \cdot N_2 - N_2) + N_1 \cdot N_2 + 1)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot (N_1^2 - N_1 + 1)}{\sqrt{N_2 \cdot (N_1^2 - N_1 + 1) \cdot (N_1^2 - N_1^2 \cdot N_2 - N_2 + N_1 \cdot N_2 + 1)}} = 0$$

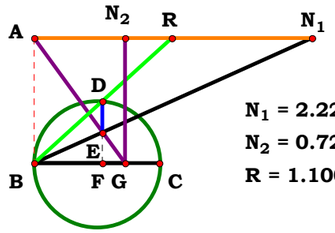
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u \cdot (A^2 - A \cdot N_u + N_u^2)}{\sqrt{N_u \cdot (A^2 - A \cdot N_u + N_u^2) \cdot [(A + B) \cdot N_u^2 - N_u^3 + (A^2 \cdot B - A^2 \cdot N_u)]}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot (Y^2 - Y \cdot p + p^2)}{\sqrt{Z \cdot (Y^2 - Y \cdot p + p^2) \cdot (Y^2 \cdot q - Z \cdot p^2 - Y^2 \cdot Z + p^2 \cdot q + Y \cdot Z \cdot p)}} = 0$$

3OBT3R5



$N_1 = 2.22222$
$N_2 = 0.72727$
$R = 1.10096$

Unit. $AB := 1$ **Given.** $N_1 := 2.22222$ $N_2 := .72727$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BF := \frac{N_1 \cdot N_2}{N_1 + N_2}$ $DF := \sqrt{BF \cdot (AB - BF)}$

$R := \frac{BF \cdot AB}{DF}$ $R = 1.10096$

Definitions.

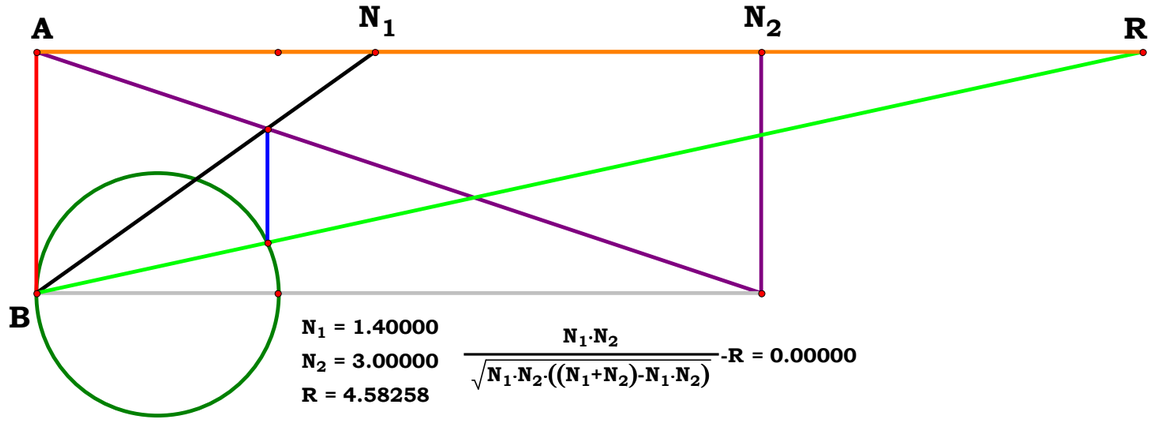
$$R - \frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot (N_1 + N_2 - N_1 \cdot N_2)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u}{\sqrt{N_u \cdot (A + B - N_u)}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

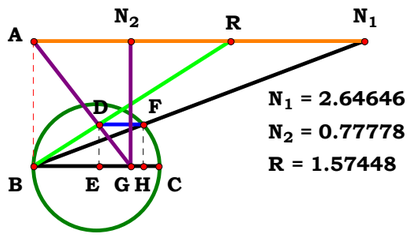
$$R - \frac{Y \cdot Z}{\sqrt{Y \cdot Z \cdot (Y \cdot q - Y \cdot Z + Z \cdot p)}} = 0$$



$N_1 = 1.40000$
$N_2 = 3.00000$
$R = 4.58258$

$\frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot ((N_1 + N_2) - N_1 \cdot N_2)}} - R = 0.00000$

3OBT3R6



Unit. $AB := 1$ Given. $N_1 := 2.64646$ $N_2 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

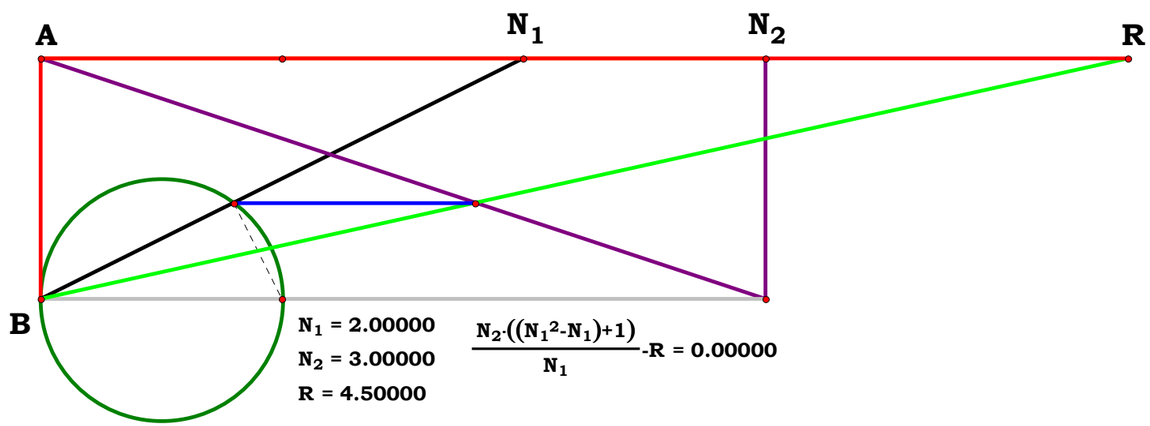
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BF := \frac{N_1 \cdot AB}{BN_1}$

$FH := \frac{AB \cdot BF}{BN_1}$ $EH := \frac{N_2 \cdot FH}{AB}$

$BE := N_2 - EH$ $R := \frac{BE \cdot AB}{FH}$

$R = 1.574478$



Definitions.

$R - \frac{N_2 \cdot \left(N_1^2 - N_1 + 1\right)}{N_1} = 0$

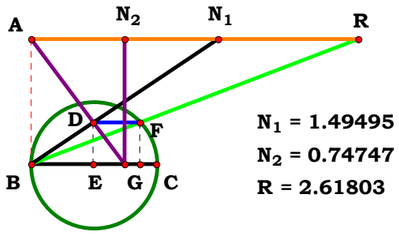
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{A^2 - A \cdot N_u + N_u^2}{A \cdot B} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot \left(Y^2 - Y \cdot p + p^2\right)}{Y \cdot p \cdot q} = 0$

3OBT3R7



$N_1 = 1.49495$
$N_2 = 0.74747$
$R = 2.61803$

Unit. $AB := 1$ Given. $N_1 := 1.49495$ $N_2 := .74747$

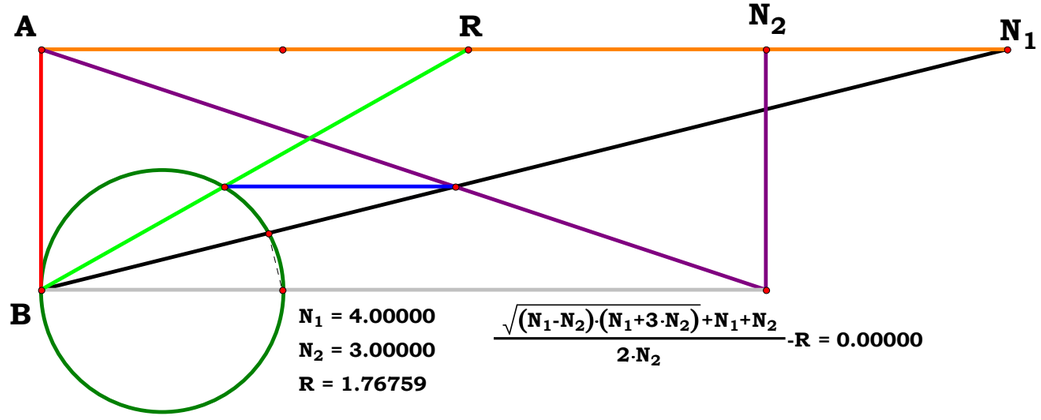
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BE := \frac{N_2 \cdot N_1}{N_1 + N_2} \quad DE := \frac{BE}{N_1}$$

$$EG := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2} \quad BG := AB - EG$$

$$R := \frac{BG \cdot AB}{DE} \quad R = 2.61805$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$R = 1.76759$

$$\frac{\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}+N_1+N_2}{2\cdot N_2} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{(N_1 - N_2)\cdot(N_1 + 3\cdot N_2)} + (N_1 + N_2)}{2\cdot N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B + \sqrt{2\cdot A\cdot B - 3\cdot A^2 + B^2}}{2\cdot A} = 0$$

$$N_1 - \frac{Y}{p} = 0 \quad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y\cdot q + Z\cdot p + \sqrt{Y^2\cdot q^2 + 2\cdot Y\cdot Z\cdot p\cdot q - 3\cdot Z^2\cdot p^2}}{2\cdot Z\cdot p} = 0$$

3OBT3R8

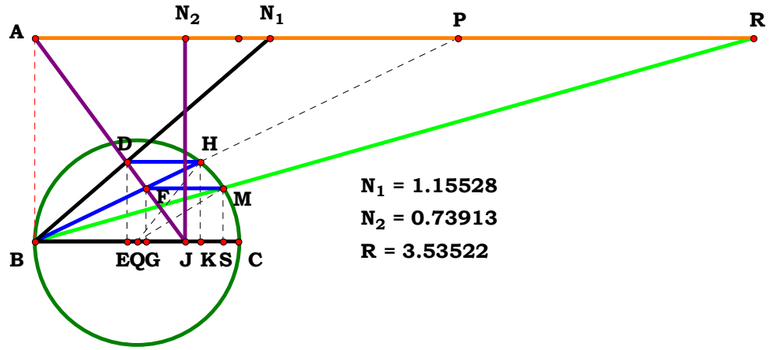
Descriptions.

$$HK := \frac{N_2}{N_1 + N_2} \qquad BK := \frac{AB}{2} + \sqrt{\left(\frac{AB}{2}\right)^2 - HK^2}$$

$$AP := \frac{BK}{HK} \qquad MS := \frac{N_2}{AP + N_2}$$

$$BS := \frac{AB}{2} + \sqrt{\left(\frac{AB}{2}\right)^2 - MS^2}$$

$$R := \frac{BS}{MS} \qquad R = 3.535223$$

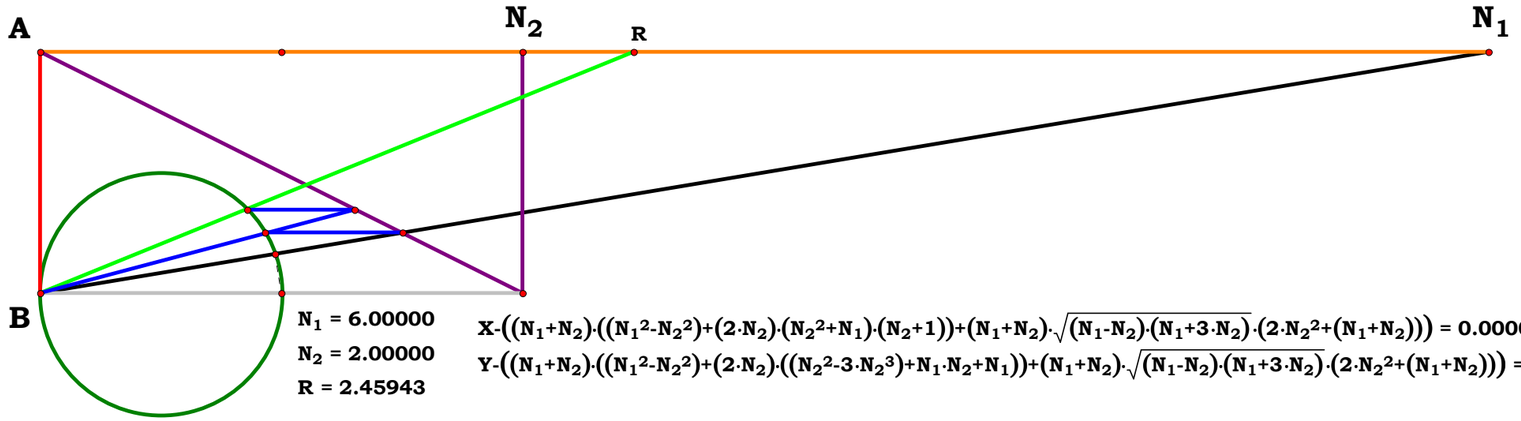


$N_1 = 1.15528$
$N_2 = 0.73913$
$R = 3.53522$

Unit. $AB := 1$ **Given.** $N_1 := 1.15528$ $N_2 := .73913$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$



$N_1 = 6.00000$
$N_2 = 2.00000$
$R = 2.45943$

$X\text{-}\left((N_1+N_2)\cdot\left((N_1^2-N_2^2)+(2\cdot N_2)\cdot(N_2^2+N_1)\cdot(N_2+1)\right)+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot(2\cdot N_2^2+(N_1+N_2))\right) = 0.00000$

$Y\text{-}\left((N_1+N_2)\cdot\left((N_1^2-N_2^2)+(2\cdot N_2)\cdot((N_2^2-3\cdot N_2^3)+N_1\cdot N_2+N_1)\right)+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot(2\cdot N_2^2+(N_1+N_2))\right) = 0.00000$

$$\frac{\sqrt{2}\cdot(N_1+N_2)\cdot(\sqrt{X}+\sqrt{Y})}{4\cdot N_2^2\cdot\sqrt{(N_1+N_2)^3}}\text{-}R = 0.00000$$

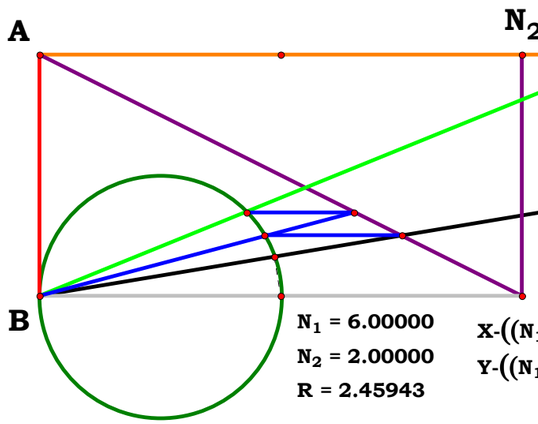
Definitions.

$$R - \frac{\sqrt{2}\cdot\left[\begin{array}{l}\sqrt{(N_1+N_2)\cdot\left[N_1^2-N_2^2+2\cdot N_2\cdot\left(N_2^2+N_1\right)\cdot(N_2+1)\right]}+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot\left(2\cdot N_2^2+N_2+N_1\right) \ \ldots \\ +\sqrt{(N_1+N_2)\cdot\left[N_1^2-N_2^2+2\cdot N_2\cdot\left(N_2^2-3\cdot N_2^3+N_1\cdot N_2+N_1\right)\right]}+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot\left(2\cdot N_2^2+N_2+N_1\right)\end{array}\right]\cdot(N_1+N_2)}{4\cdot N_2^2\cdot\sqrt{(N_1+N_2)^3}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u^3\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]} \ \ldots \\ +\sqrt{N_u^3\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]}\end{array}\right]}{N_u^2\cdot\sqrt{N_u\cdot(A+B)\cdot A}} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$



$N_1 = 6.00000$

$N_2 = 2.00000$

$R = 2.45943$

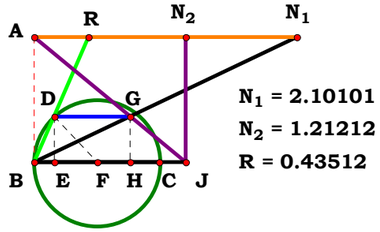
$$X\text{-}\left((N_1+N_2)\cdot\left((N_1^2-N_2^2)+(2\cdot N_2)\cdot(N_2^2+N_1)\cdot(N_2+1)\right)+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot(2\cdot N_2^2+(N_1+N_2))\right) = 0.00000$$

$$Y\text{-}\left((N_1+N_2)\cdot\left((N_1^2-N_2^2)+(2\cdot N_2)\cdot((N_2^2-3\cdot N_2^3)+N_1\cdot N_2+N_1)\right)+(N_1+N_2)\cdot\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}\cdot(2\cdot N_2^2+(N_1+N_2))\right) = 0.00000$$

$$\frac{\sqrt{2}\cdot(N_1+N_2)\cdot(\sqrt{X}+\sqrt{Y})}{4\cdot N_2^2\cdot\sqrt{(N_1+N_2)^3}}\text{-}R = 0.00000$$

$$R - \frac{q\cdot\left[\begin{array}{l}\sqrt{(Y\cdot q+Z\cdot p)\cdot\left(2\cdot p\cdot Z^2\cdot q+p\cdot Z\cdot q^2+Y\cdot q^3\right)\cdot\sqrt{Y^2\cdot q^2+2\cdot Y\cdot Z\cdot p\cdot q-3\cdot Z^2\cdot p^2}\ \ldots} \ \ldots \\ +\ (Y\cdot q+Z\cdot p)\cdot\left(Y^2\cdot q^4+2\cdot Y\cdot Z^2\cdot p\cdot q^2+2\cdot Y\cdot Z\cdot p\cdot q^3+2\cdot Z^4\cdot p^2+2\cdot Z^3\cdot p^2\cdot q-Z^2\cdot p^2\cdot q^2\right)} \\ +\ \sqrt{(Y\cdot q+Z\cdot p)\cdot\left(2\cdot p\cdot Z^2\cdot q+p\cdot Z\cdot q^2+Y\cdot q^3\right)\cdot\sqrt{Y^2\cdot q^2+2\cdot Y\cdot Z\cdot p\cdot q-3\cdot Z^2\cdot p^2}\ \ldots} \\ \quad +\ (Y\cdot q+Z\cdot p)\cdot\left(Y^2\cdot q^4+2\cdot Y\cdot Z^2\cdot p\cdot q^2+2\cdot Y\cdot Z\cdot p\cdot q^3-6\cdot Z^4\cdot p^2+2\cdot Z^3\cdot p^2\cdot q-Z^2\cdot p^2\cdot q^2\right)\end{array}\right]\cdot\sqrt{2\cdot q^3}}{4\cdot Z^2\cdot p\cdot\sqrt{q^5}\cdot\sqrt{(Y\cdot q+Z\cdot p)}} = 0$$

3OBT3R9



$N_1 = 2.10101$
$N_2 = 1.21212$
$R = 0.43512$

Unit. $AB := 1$ Given. $N_1 := 2.10101$ $N_2 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

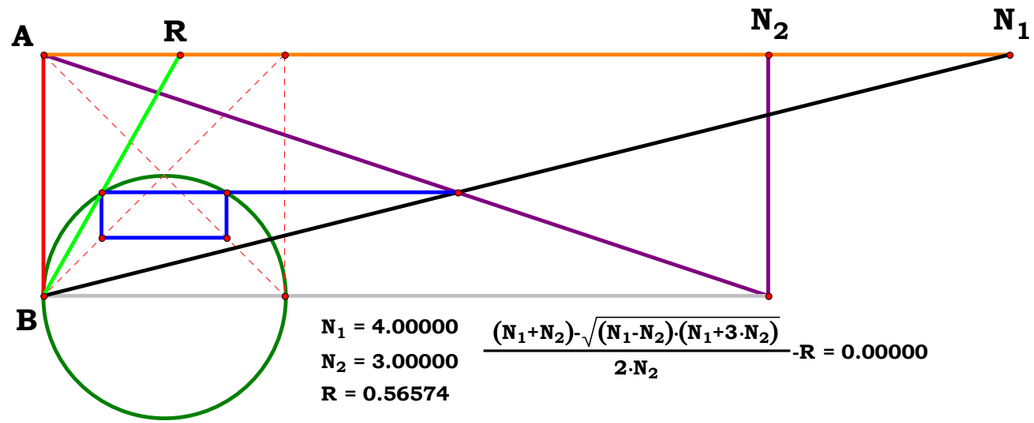
$$BH := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad GH := \frac{AB \cdot BH}{N_1}$$

$$EF := \sqrt{\left(\frac{AB}{2}\right)^2 - GH^2} \qquad BE := \frac{AB}{2} - EF$$

$$R := \frac{BE \cdot AB}{GH} \qquad R = 0.43512$$

Definitions.

$$R - \frac{N_1 + N_2 - \sqrt{(N_1 - N_2) \cdot (N_1 + 3 \cdot N_2)}}{2 \cdot N_2} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$R = 0.56574$

$$\frac{(N_1+N_2)-\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}}{2\cdot N_2} - R = 0.00000$$

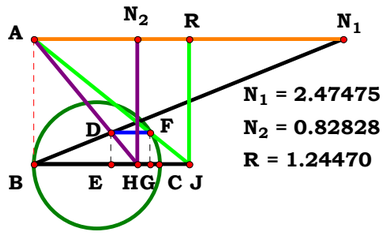
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B - \sqrt{(B - A) \cdot (3 \cdot A + B)}}{2 \cdot A} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q + Z \cdot p - \sqrt{Y^2 \cdot q^2 + 2 \cdot Y \cdot Z \cdot p \cdot q - 3 \cdot Z^2 \cdot p^2}}{2 \cdot Z \cdot p} = 0$$

3OBT3R10



Unit. $AB := 1$ Given. $N_1 := 2.13803$ $N_2 := .74817$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BE := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad DE := \frac{AB \cdot BE}{N_1}$$

$$BG := \frac{AB}{2} + \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2} \qquad R := \frac{BG \cdot AB}{AB - DE}$$

$R = 1.252138$

Definitions.

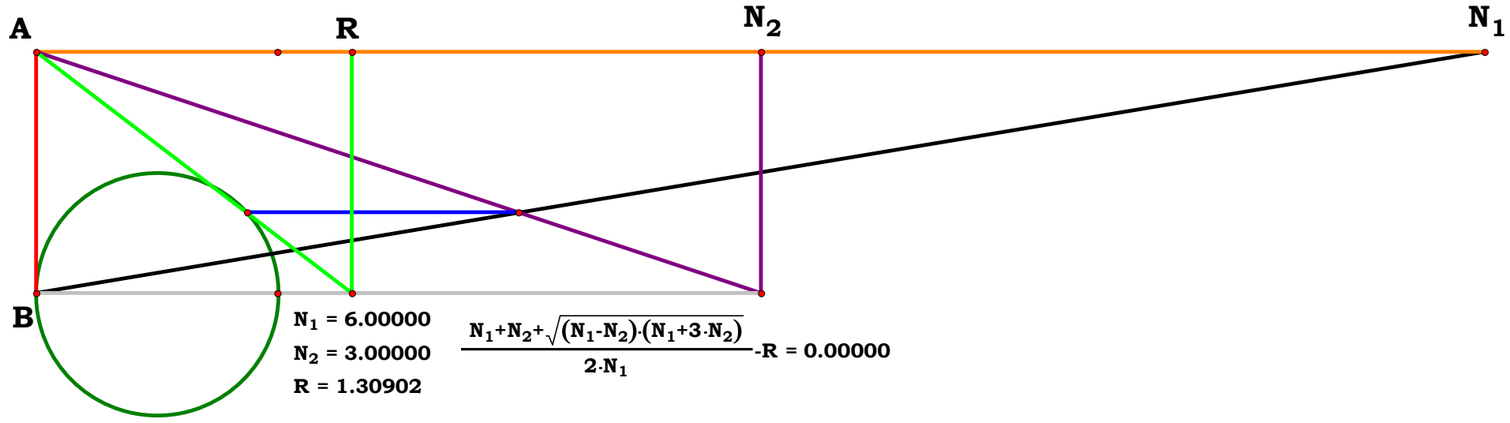
$$R - \frac{\sqrt{(N_1 - N_2)\cdot(N_1 + 3\cdot N_2)} + N_1 + N_2}{2\cdot N_1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

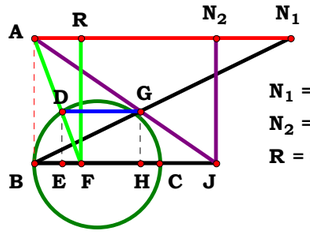
$$R - \frac{A + B + \sqrt{(B - A)\cdot(3\cdot A + B)}}{2\cdot B} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{(Y\cdot q - Z\cdot p)\cdot(Y\cdot q + 3\cdot Z\cdot p)} + Y\cdot q + Z\cdot p}{2\cdot Y\cdot q} = 0$$



3OBT3R11



$N_1 = 2.05051$
$N_2 = 1.45455$
$R = 0.37793$

Unit. $AB := 1$ Given. $N_1 := 2.05051$ $N_2 := 1.45455$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BH := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad GH := \frac{AB \cdot BH}{N_1}$$

$$BE := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - GH^2} \qquad R := \frac{BE \cdot AB}{AB - GH}$$

$R = 0.377935$

Definitions.

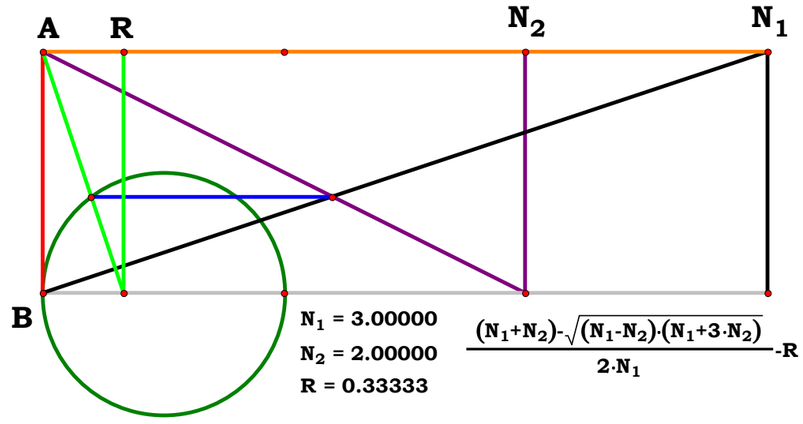
$$R - \frac{N_1 + N_2 - \sqrt{(N_1 - N_2) \cdot (N_1 + 3 \cdot N_2)}}{2 \cdot N_1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B - \sqrt{[(B - A) \cdot (3 \cdot A + B)]}}{2 \cdot B} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

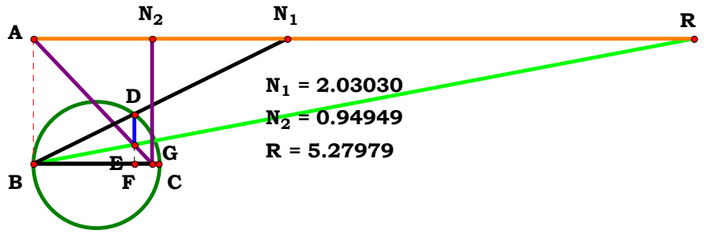
$$R - \frac{Y \cdot q + Z \cdot p - \sqrt{Y^2 \cdot q^2 + 2 \cdot Y \cdot Z \cdot p \cdot q - 3 \cdot Z^2 \cdot p^2}}{2 \cdot Y \cdot q} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$R = 0.33333$

$$\frac{(N_1+N_2)-\sqrt{(N_1-N_2)\cdot(N_1+3\cdot N_2)}}{2\cdot N_1} - R = 0.00000$$

3OBT3R12



Unit. $AB := 1$ **Given.** $N_1 := 2.03030$ $N_2 := .94949$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$BF := \frac{N_1 \cdot BD}{BN_1}$ $EF := \frac{AB \cdot (N_2 - BF)}{N_2}$

$R := \frac{BF \cdot AB}{EF}$ $R = 5.279922$

Definitions.

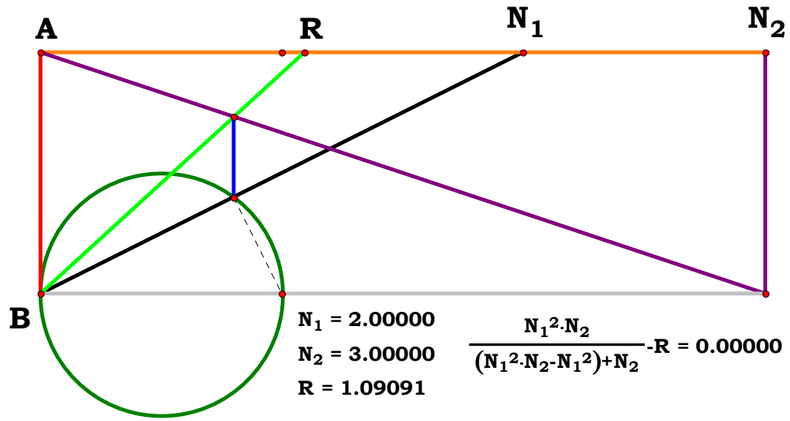
$$R - \frac{N_1^2 \cdot N_2}{N_1^2 \cdot N_2 - N_1^2 + N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

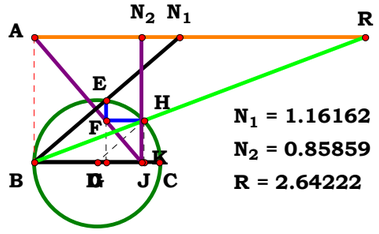
$$R - \frac{N_u^2}{A^2 + N_u^2 - B \cdot N_u} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^2 \cdot Z}{Y^2 \cdot Z + Z \cdot p^2 - Y^2 \cdot q} = 0$$



3OBT3R13



$N_1 = 1.16162$
$N_2 = 0.85859$
$R = 2.64222$

Unit. $AB := 1$ **Given.** $N_1 := 1.16162$ $N_2 := .85859$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

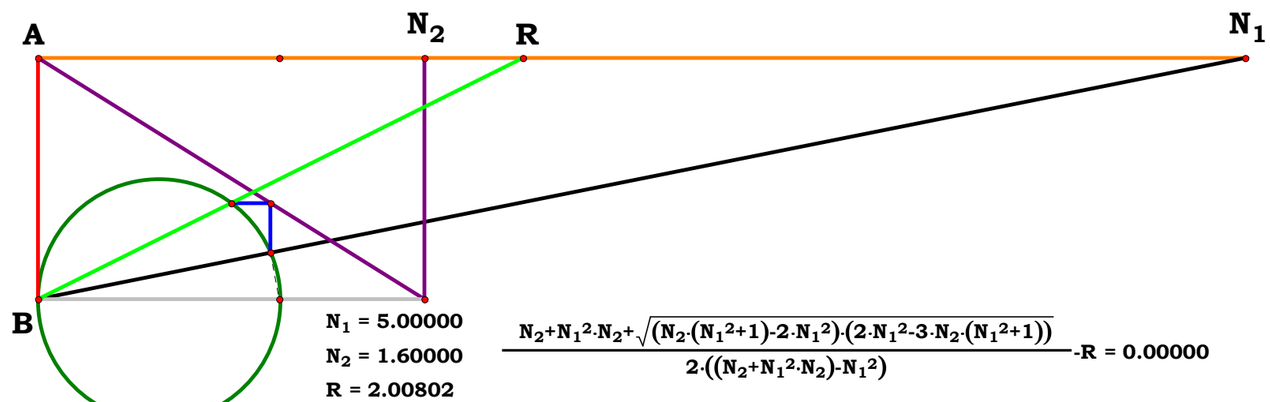
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{N_1 \cdot AB}{BN_1}$

$BG := \frac{N_1 \cdot BE}{BN_1}$ $GK := N_2 - BG$

$FG := \frac{AB \cdot GK}{N_2}$ $DJ := \sqrt{\left(\frac{AB}{2}\right)^2 - FG^2}$

$BJ := \frac{AB}{2} + DJ$ $R := \frac{BJ \cdot AB}{FG}$

$R = 2.642205$



$N_1 = 5.00000$
$N_2 = 1.60000$
$R = 2.00802$

$$\frac{N_2+N_1^2\cdot N_2+\sqrt{(N_2\cdot(N_1^2+1)-2\cdot N_1^2)\cdot(2\cdot N_1^2-3\cdot N_2\cdot(N_1^2+1))}}{2\cdot((N_2+N_1^2\cdot N_2)-N_1^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 + N_1^2 \cdot N_2 + \sqrt{\left[N_2 \cdot \left(N_1^2 + 1\right) - 2 \cdot N_1^2\right] \cdot \left[2 \cdot N_1^2 - 3 \cdot N_2 \cdot \left(N_1^2 + 1\right)\right]}}{2 \cdot \left(N_2 + N_1^2 \cdot N_2 - N_1^2\right)} = 0$$

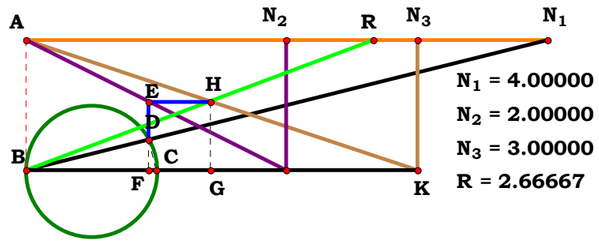
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{\left(3 \cdot A^2 + 3 \cdot N_u^2 - 2 \cdot B \cdot N_u\right) \cdot \left(2 \cdot B \cdot N_u - N_u^2 - A^2\right)} + A^2 + N_u^2}{2 \cdot \left(A^2 + N_u^2 - B \cdot N_u\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^2 \cdot Z + Z \cdot p^2 + \sqrt{\left(2 \cdot Y^2 \cdot q - 3 \cdot Z \cdot p^2 - 3 \cdot Y^2 \cdot Z\right) \cdot \left(Y^2 \cdot Z + Z \cdot p^2 - 2 \cdot Y^2 \cdot q\right)}}{2 \cdot \left(Y^2 \cdot Z + Z \cdot p^2 - Y^2 \cdot q\right)} = 0$$

3OBT3R14



Unit. $AB := 1$ **Given.** $N_1 := 4$ $N_2 := 2$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$BF := \frac{N_1 \cdot BD}{BN_1}$ $EF := \frac{BF}{N_2}$

$BG := \frac{BF \cdot N_3}{N_2}$ $R := \frac{BG}{AB - EF}$

$R = 2.666667$

Definitions.

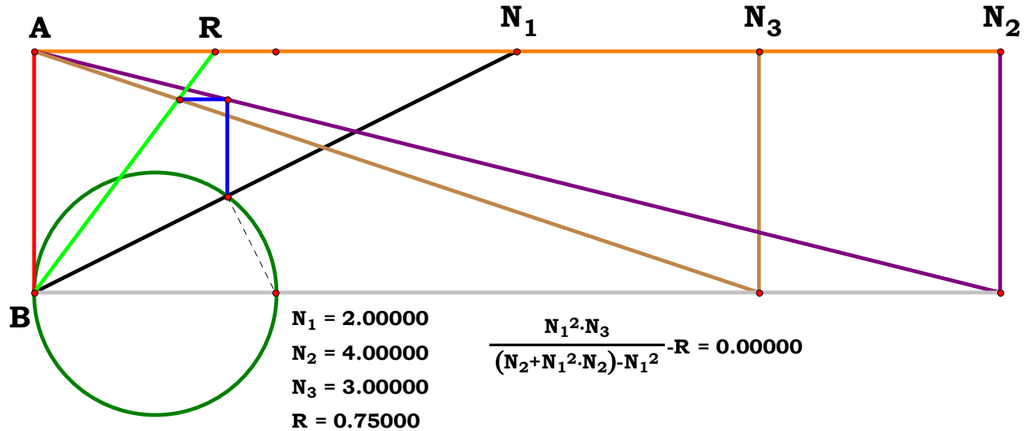
$$R - \frac{N_1^2 \cdot N_3}{N_2 + N_1^2 \cdot N_2 - N_1^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{B \cdot N_u^2}{C \cdot \left(A^2 + N_u^2 - B \cdot N_u\right)} = 0$$

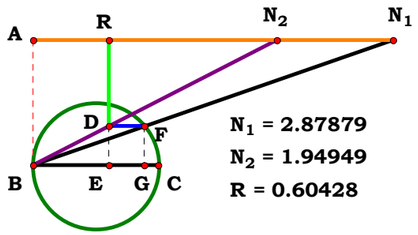
$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X^2 \cdot Z \cdot p}{q \cdot \left(X^2 \cdot Y + Y \cdot o^2 - X^2 \cdot p\right)} = 0$$



$\frac{N_1^2 \cdot N_3}{(N_2 + N_1^2 \cdot N_2) - N_1^2} - R = 0.00000$

3OBT4R0



Unit. $AB := 1$ Given. $N_1 := 2.87879$ $N_2 := 1.94949$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BF := \frac{N_1 \cdot AB}{BN_1}$

$FG := \frac{AB \cdot BF}{BN_1}$ $R := N_2 \cdot FG$

$R = 0.604276$

Definitions.

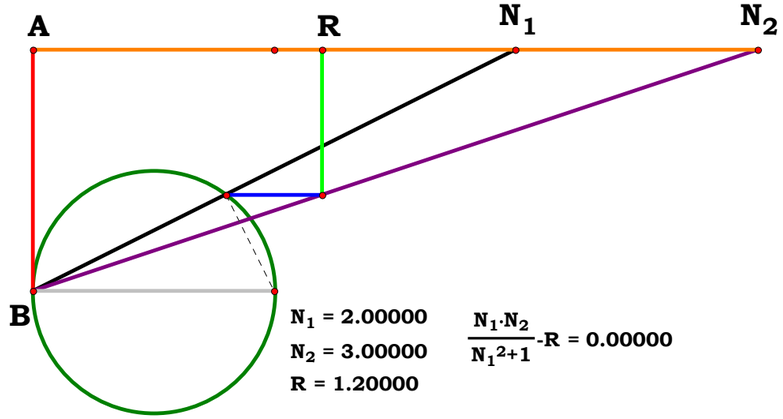
$R - \frac{N_1 \cdot N_2}{N_1^2 + 1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

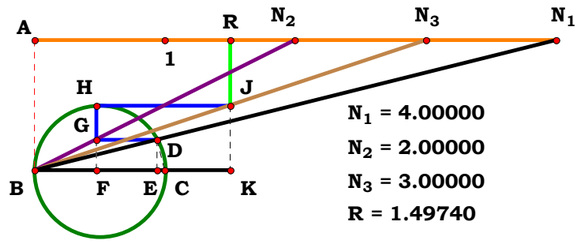
$R - \frac{A \cdot N_u^2}{B \cdot \left(A^2 + N_u^2\right)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot p}{q \cdot \left(Y^2 + p^2\right)} = 0$



3OBT4R1



Unit. $AB := 1$ **Given.** $N_1 := 4$ $N_2 := 2$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

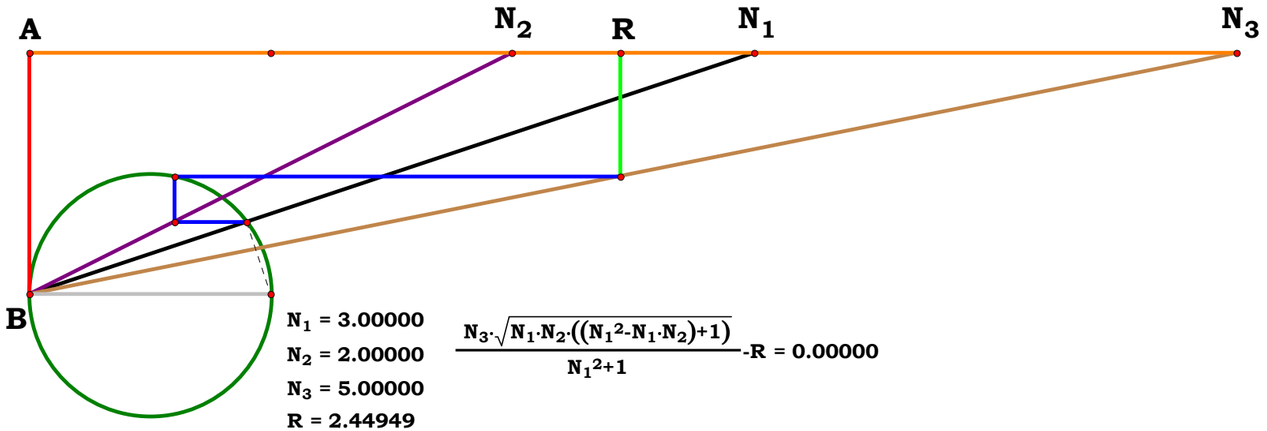
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BF := \frac{N_2 \cdot DE}{AB}$

$HF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{N_3 \cdot HF}{AB}$

$R = 1.497403$



Definitions.

$$R - \frac{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot \left(N_1^2 - N_1 \cdot N_2 + 1\right)}}{N_1^2 + 1} = 0$$

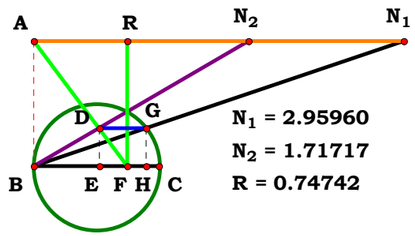
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{A} \cdot N_u^2 \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}}{B \cdot C \cdot \left(A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot \sqrt{o} \cdot \sqrt{p \cdot X^3 \cdot Y - X^2 \cdot Y^2 \cdot o + p \cdot X \cdot Y \cdot o^2}}{p \cdot q \cdot \left(X^2 + o^2\right)} = 0$$

3OBT4R2



Unit. $AB := 1$ Given. $N_1 := 2.9596$ $N_2 := 1.71717$

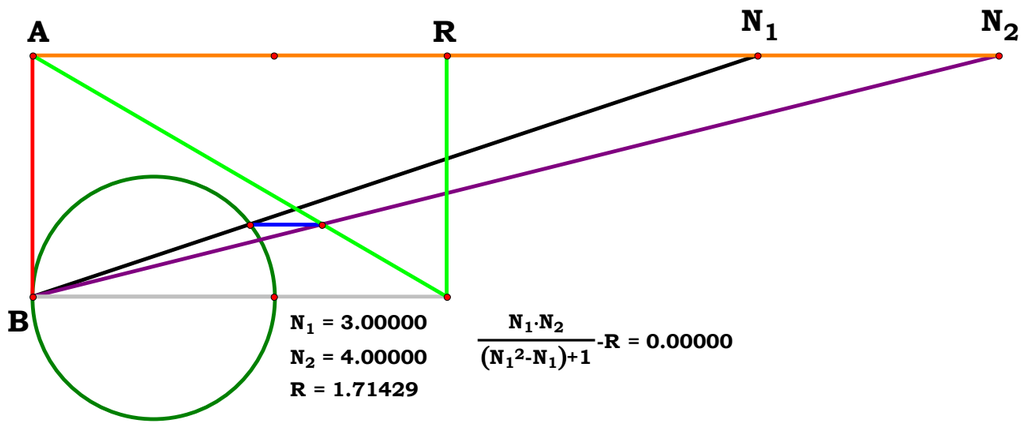
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

$GH := \frac{AB \cdot BG}{BN_1}$ $BE := \frac{N_2 \cdot GH}{AB}$

$R := \frac{BE \cdot AB}{AB - GH}$ $R = 0.747413$



Definitions.

$R - \frac{N_1 \cdot N_2}{N_1^2 - N_1 + 1} = 0$

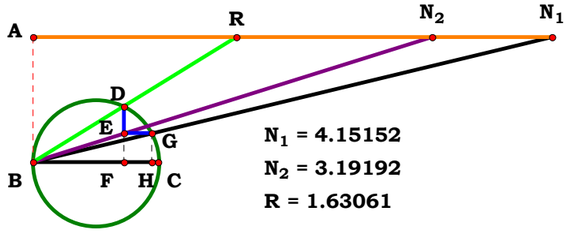
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{A \cdot N_u^2}{B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot p}{q \cdot \left(Y^2 - Y \cdot p + p^2\right)} = 0$

3OBT4R3



Unit. $AB := 1$ Given. $N_1 := 4.15152$ $N_2 := 3.19192$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

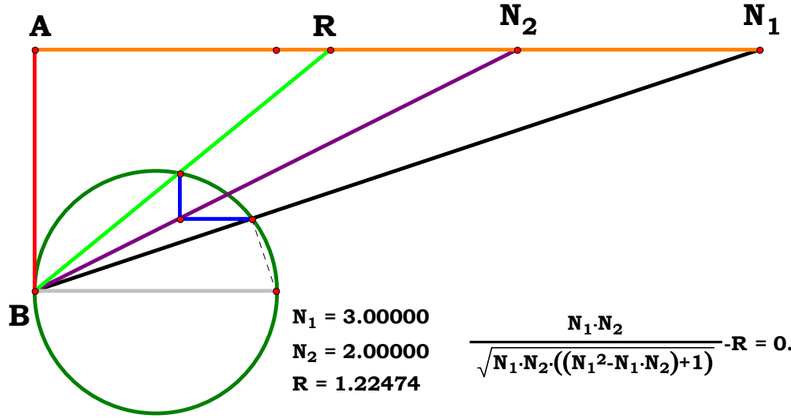
$GH := \frac{AB \cdot BG}{BN_1}$ $BF := \frac{N_2 \cdot GH}{AB}$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{DF}$

$R = 1.630607$

Definitions.

$$R - \frac{(N_1 \cdot N_2)^{\frac{1}{2}}}{(N_1^2 - N_1 \cdot N_2 + 1)^{\frac{1}{2}}} = 0$$



$$\frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot ((N_1^2 - N_1 \cdot N_2) + 1)}} - R = 0.00000$$

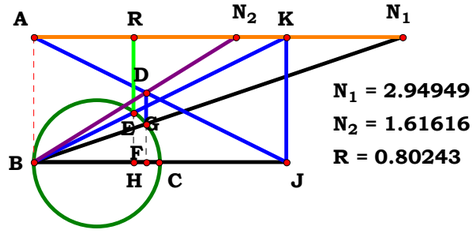
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A \cdot N_u}{\sqrt{N_u^2 \cdot A \cdot (B - A) + A^3 \cdot B}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{p \cdot \sqrt{q} \cdot \sqrt{Y \cdot Z}}{\sqrt{p \cdot q} \cdot \sqrt{q \cdot Y^2 - Z \cdot Y \cdot p + q \cdot p^2}} = 0$$

3OBT4R4



Unit. $AB := 1$ Given. $N_1 := 2.94949$ $N_2 := 1.61616$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

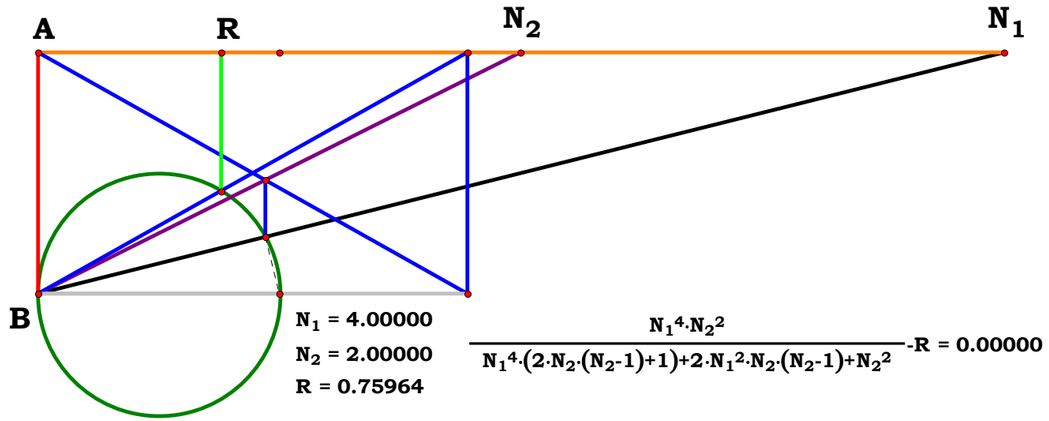
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{N_1 \cdot AB}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $DF := \frac{AB \cdot BF}{N_2}$

$BJ := \frac{BF \cdot AB}{AB - DF}$ $BK := \sqrt{AB^2 + BJ^2}$

$BG := \frac{BJ \cdot AB}{BK}$ $R := \frac{BJ \cdot BG}{BK}$

$R = 0.802431$



Definitions.

$$R - \frac{N_1^4 \cdot N_2^2}{N_1^4 \cdot \left[2 \cdot N_2 \cdot (N_2 - 1) + 1\right] + 2 \cdot N_1^2 \cdot N_2 \cdot (N_2 - 1) + N_2^2} = 0$$

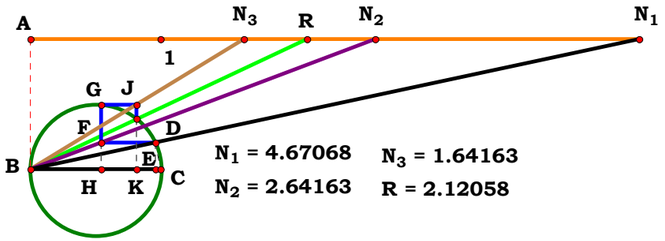
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u^4}{N_u^2 \cdot B^2 - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right) + A^4 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^4 \cdot Z^2}{Y^4 \cdot \left(2 \cdot Z^2 - 2 \cdot Z \cdot q + q^2\right) + 2 \cdot Y^2 \cdot Z \cdot p^2 \cdot (Z - q) + Z^2 \cdot p^4} = 0$$

3OBT4R5



Unit. $AB := 1$ Given. $N_1 := 4.67068$ $N_2 := 2.64163$ $N_3 := 1.64163$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

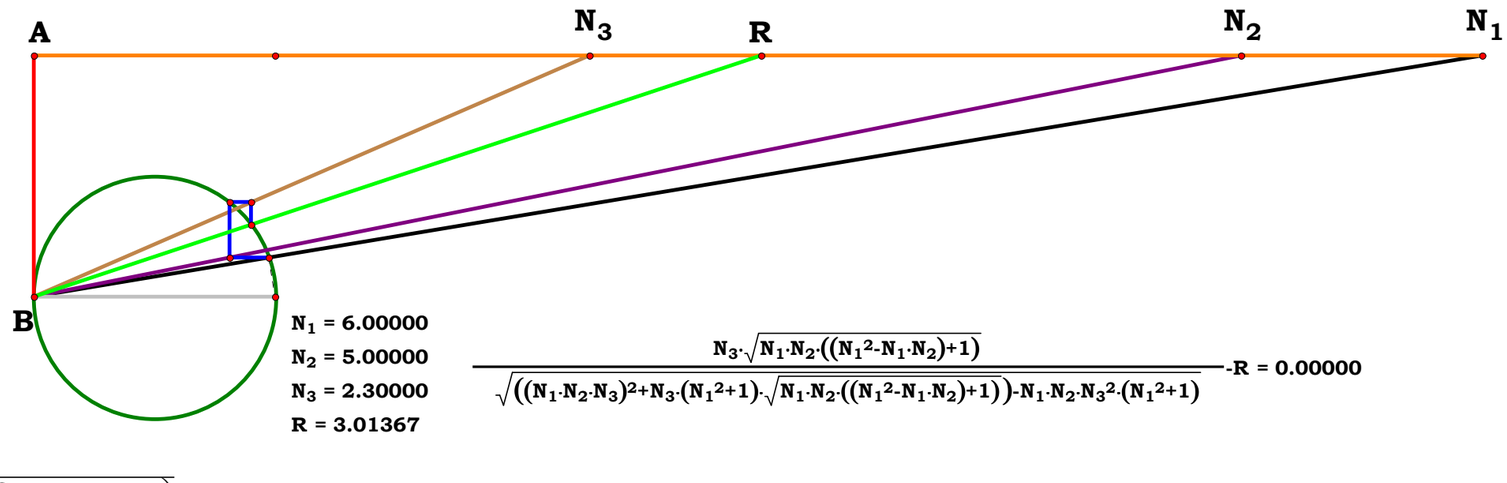
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DE := \frac{AB \cdot BD}{BN_1}$ $BH := \frac{N_2 \cdot DE}{AB}$

$GH := \sqrt{BH \cdot (AB - BH)}$ $BK := \frac{N_3 \cdot GH}{AB}$

$GK := \sqrt{BK \cdot (AB - BK)}$ $R := \frac{BK \cdot AB}{GK}$

$R = 2.12059$



$$\frac{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot ((N_1^2 - N_1 \cdot N_2) + 1)}}{\sqrt{((N_1 \cdot N_2 \cdot N_3)^2 + N_3 \cdot (N_1^2 + 1) \cdot \sqrt{N_1 \cdot N_2 \cdot ((N_1^2 - N_1 \cdot N_2) + 1)}) - N_1 \cdot N_2 \cdot N_3^2 \cdot (N_1^2 + 1)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot \left(N_1^2 - N_1 \cdot N_2 + 1\right)}}{\sqrt{N_1^2 \cdot N_2^2 \cdot N_3^2 + N_3 \cdot \left(N_1^2 + 1\right) \cdot \sqrt{N_1 \cdot N_2 \cdot \left(N_1^2 - N_1 \cdot N_2 + 1\right)} - N_1 \cdot N_2 \cdot N_3^2 \cdot \left(N_1^2 + 1\right)}} = 0$$

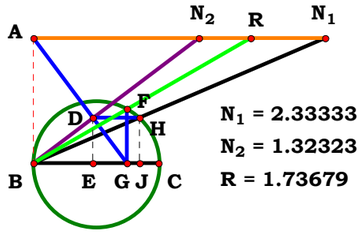
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}}{\sqrt{N_u^4 \cdot \sqrt{A} \cdot (A - B) + B \cdot \left(C \cdot A^2 + C \cdot N_u^2\right) \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2} - A^{\frac{5}{2}} \cdot B \cdot N_u^2}} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot \sqrt{o^{\frac{7}{2}}} \cdot \sqrt{X \cdot Y \cdot \left(p \cdot X^2 - Y \cdot X \cdot o + p \cdot o^2\right)}}{o^{\frac{3}{2}} \cdot \sqrt{Z \cdot \left[X^2 \cdot p \cdot q \cdot \sqrt{X \cdot Y \cdot \left(p \cdot X^2 - Y \cdot X \cdot o + p \cdot o^2\right)} + o^2 \cdot p \cdot q \cdot \sqrt{X \cdot Y \cdot \left(p \cdot X^2 - Y \cdot X \cdot o + p \cdot o^2\right)} + X^2 \cdot Y^2 \cdot Z \cdot o^{\frac{3}{2}} - X \cdot Y \cdot Z \cdot o^{\frac{5}{2}} \cdot p - X^3 \cdot Y \cdot Z \cdot \sqrt{o} \cdot p\right]}} = 0$$

3OBT4R6



$N_1 = 2.33333$

$N_2 = 1.32323$

$R = 1.73679$

Unit. $AB := 1$ Given. $N_1 := 2.33333$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

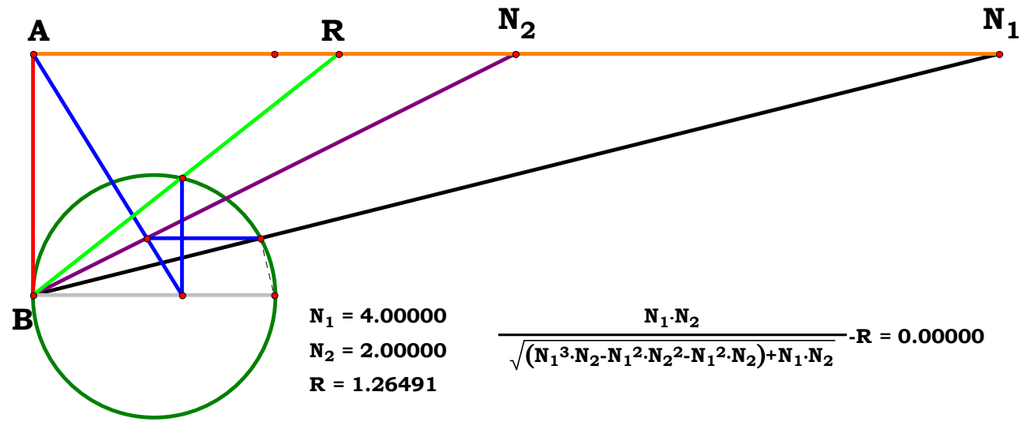
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BH := \frac{N_1 \cdot AB}{BN_1}$

$HJ := \frac{AB \cdot BH}{BN_1}$ $BE := \frac{N_2 \cdot HJ}{AB}$

$BG := \frac{BE \cdot AB}{AB - HJ}$ $FG := \sqrt{BG \cdot (AB - BG)}$

$R := \frac{BG \cdot AB}{FG}$ $R = 1.736792$



$N_1 = 4.00000$

$N_2 = 2.00000$

$R = 1.26491$

$\frac{N_1 \cdot N_2}{\sqrt{(N_1^3 \cdot N_2 - N_1^2 \cdot N_2^2 - N_1^2 \cdot N_2) + N_1 \cdot N_2}} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_2}{\sqrt{N_1^3 \cdot N_2 - N_1^2 \cdot N_2^2 - N_1^2 \cdot N_2 + N_1 \cdot N_2}} = 0$$

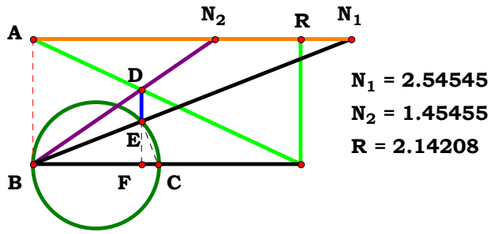
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{A} \cdot N_u}{\sqrt{B \cdot A^2 - A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot \sqrt{p}}{\sqrt{Y \cdot Z \cdot (Y^2 \cdot q + p^2 \cdot q - Y \cdot Z \cdot p - Y \cdot p \cdot q)}} = 0$$

3OBT4R7



$N_1 = 2.54545$

$N_2 = 1.45455$

$R = 2.14208$

Unit. $AB := 1$ Given. $N_1 := 2.54545$ $N_2 := 1.45455$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BE := \frac{N_1 \cdot AB}{BN_1}$

$BF := \frac{N_1 \cdot BE}{BN_1}$ $DF := \frac{AB \cdot BF}{N_2}$

$R := \frac{BF \cdot AB}{AB - DF}$ $R = 2.142064$

Definitions.

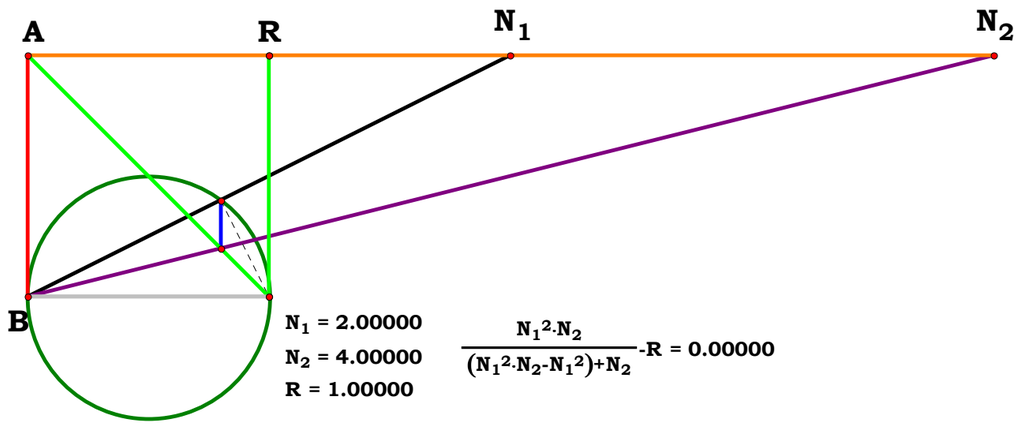
$$R - \frac{N_1^2 \cdot N_2}{N_1^2 \cdot N_2 - N_1^2 + N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u^2}{A^2 + N_u^2 - B \cdot N_u} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^2 \cdot Z}{Y^2 \cdot Z + Z \cdot p^2 - Y^2 \cdot q} = 0$$



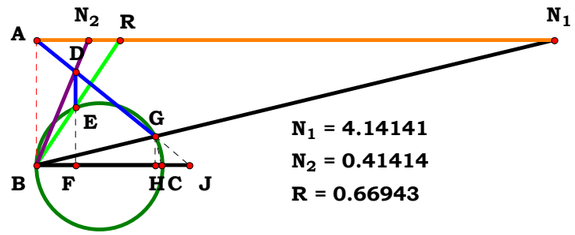
$N_1 = 2.00000$

$N_2 = 4.00000$

$R = 1.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2 \cdot N_2 - N_1^2) + N_2} - R = 0.00000$

3OBT4R8



Unit. $AB := 1$ Given. $N_1 := 4.14141$ $N_2 := .41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

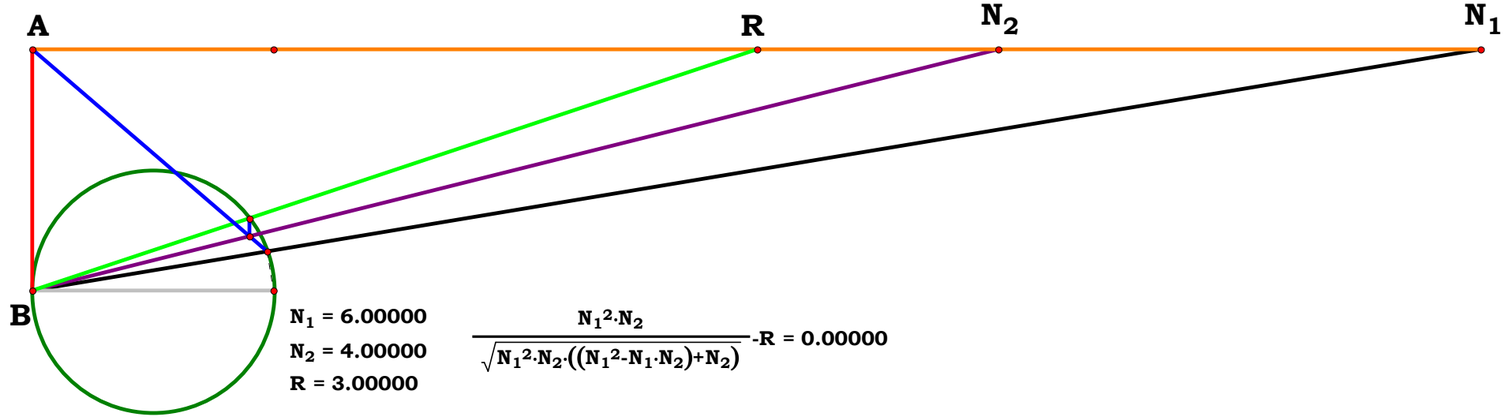
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

$GH := \frac{AB \cdot BG}{BN_1}$ $BH := \frac{N_1 \cdot BG}{BN_1}$

$BJ := \frac{BH \cdot AB}{AB - GH}$ $BF := \frac{N_2 \cdot BJ}{N_2 + BJ}$

$EF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.669427$



Definitions.

$$R - \frac{N_1^2 \cdot N_2}{\sqrt{N_1^2 \cdot N_2 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u}{\sqrt{A^2 - N_u \cdot A + B \cdot N_u}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

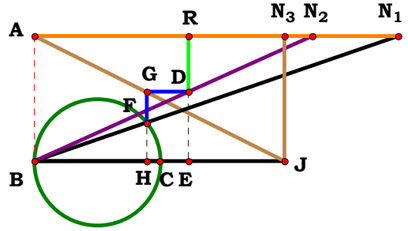
$$R - \frac{Y^2 \cdot Z}{\sqrt{q \cdot Y^4 \cdot Z - Y^3 \cdot Z^2 \cdot p + Y^2 \cdot Z^2 \cdot p^2}} = 0$$

3OBT5R0

Unit.

AB := 1

Given.



$N_1 = 2.90909$

$N_2 = 2.22222$

$N_3 = 2.00000$

$R = 1.22853$

Unit. $AB := 1$ Given. $N_1 := 2.90909$ $N_2 := 2.22222$ $N_3 := 2$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BF := \frac{N_1 \cdot AB}{BN_1}$$

$$BH := \frac{N_1 \cdot BF}{BN_1} \qquad HJ := N_3 - BH$$

$$GH := \frac{AB \cdot HJ}{N_3} \qquad R := \frac{N_2 \cdot GH}{AB}$$

$R = 1.228529$

Definitions.

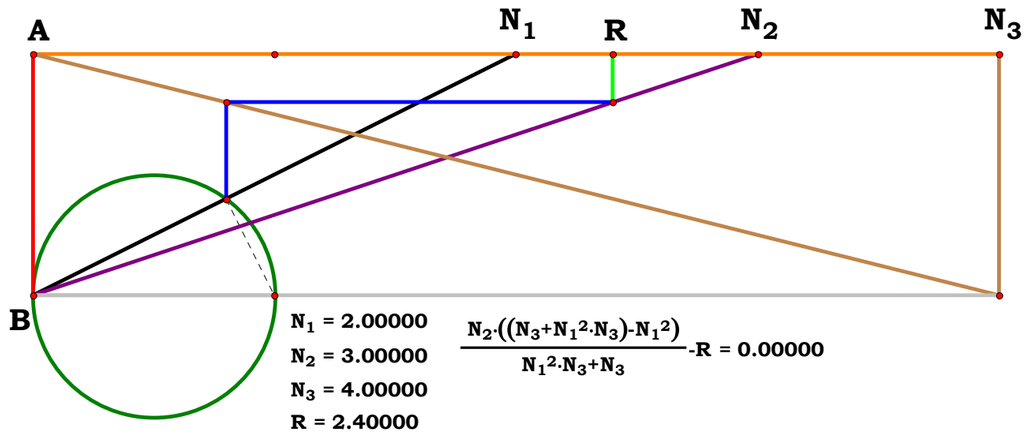
$$R - \frac{N_2 \cdot \left(N_3 + N_1^2 \cdot N_3 - N_1^2\right)}{N_1^2 \cdot N_3 + N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)}{B \cdot \left(A^2 + N_u^2\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X^2 \cdot Y \cdot (Z - q) + Y \cdot Z \cdot o^2}{Z \cdot p \cdot \left(X^2 + o^2\right)} = 0$$



$N_1 = 2.00000$

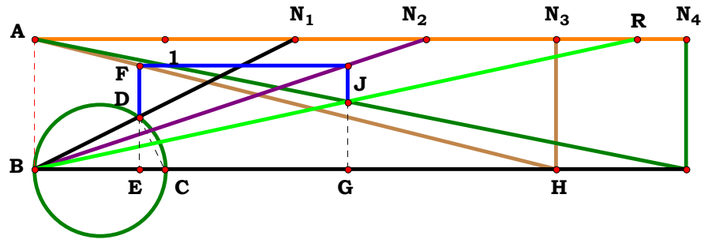
$N_2 = 3.00000$

$N_3 = 4.00000$

$R = 2.40000$

$$\frac{N_2 \cdot ((N_3 + N_1^2 \cdot N_3) - N_1^2)}{N_1^2 \cdot N_3 + N_3} - R = 0.00000$$

3OBT5R1



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 4.61538$

Unit. $AB := 1$ Given. $N_1 := 2$ $N_2 := 3$ $N_3 := 4$ $N_4 := 5$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

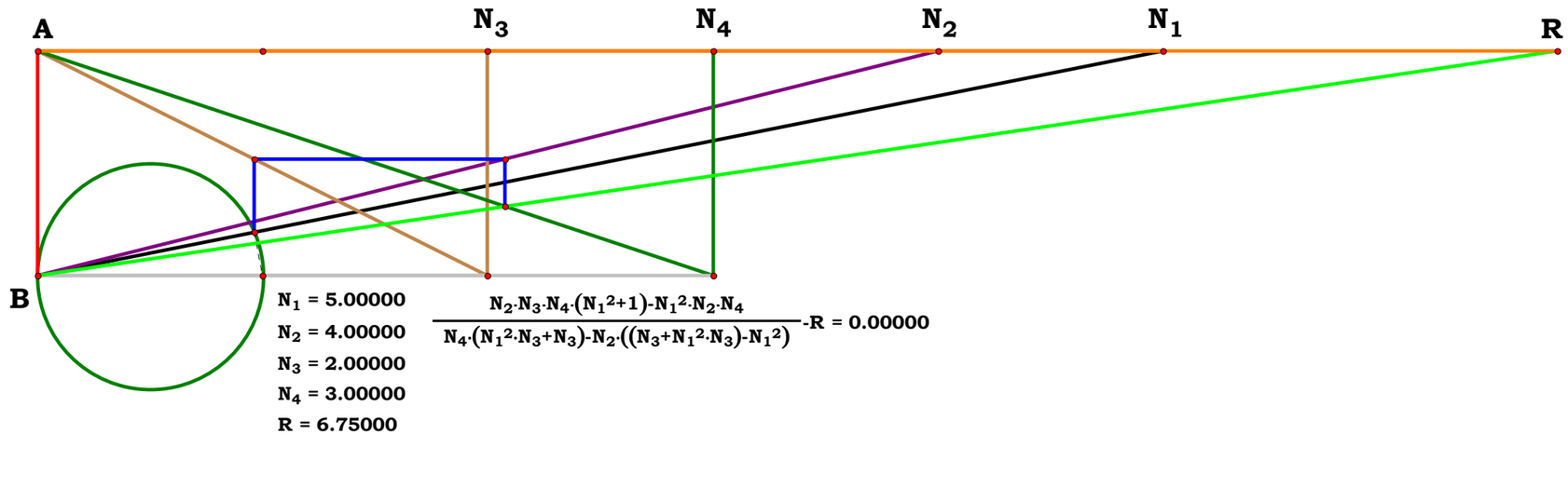
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $EH := N_3 - BE$

$EF := \frac{AB \cdot EH}{N_3}$ $BG := \frac{N_2 \cdot EF}{AB}$

$GJ := \frac{AB \cdot (N_4 - BG)}{N_4}$ $R := \frac{BG \cdot AB}{GJ}$

$R = 4.615385$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 6.75000$

$\frac{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2+1) - N_1^2 \cdot N_2 \cdot N_4}{N_4 \cdot (N_1^2 \cdot N_3 + N_3) - N_2 \cdot ((N_3 + N_1^2 \cdot N_3) - N_1^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 1) - N_1^2 \cdot N_2 \cdot N_4}{(N_1^2 \cdot N_3 + N_3) \cdot N_4 - N_2 \cdot (N_3 + N_1^2 \cdot N_3 - N_1^2)} = 0$$

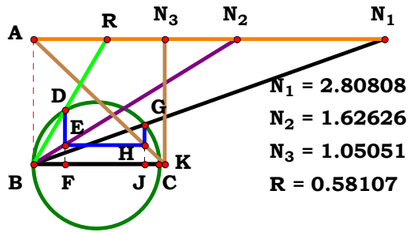
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (A^2 + N_u^2 - C \cdot N_u)}{A^2 \cdot B - A^2 \cdot D + B \cdot N_u^2 - D \cdot N_u^2 + C \cdot D \cdot N_u} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot X \cdot Y \cdot Z + X \cdot Y \cdot Z \cdot m^2 - W^2 \cdot X \cdot Z \cdot o}{W^2 \cdot Y \cdot Z \cdot n - W^2 \cdot X \cdot Y \cdot p - X \cdot Y \cdot m^2 \cdot p + Y \cdot Z \cdot m^2 \cdot n + W^2 \cdot X \cdot o \cdot p} = 0$$

3OBT5R2



Unit. $AB := 1$ Given. $N_1 := 2.80808$ $N_2 := 1.62626$ $N_3 := 1.05051$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

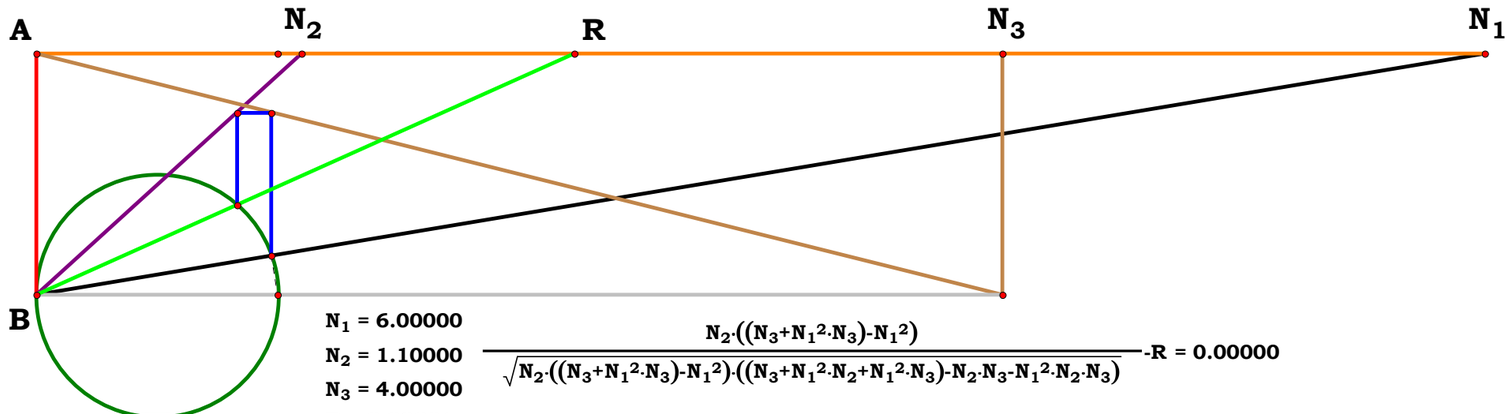
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

$BJ := \frac{N_1 \cdot BG}{BN_1}$ $JK := N_3 - BJ$

$HJ := \frac{AB \cdot JK}{N_3}$ $BF := N_2 \cdot HJ$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{DF}$

$R = 0.581077$



Definitions.

$$R - \frac{N_2 \cdot \left(N_3 + N_1^2 \cdot N_3 - N_1^2\right)}{\sqrt{N_2 \cdot \left(N_3 + N_1^2 \cdot N_3 - N_1^2\right) \cdot \left(N_3 + N_1^2 \cdot N_2 + N_1^2 \cdot N_3 - N_2 \cdot N_3 - N_1^2 \cdot N_2 \cdot N_3\right)}} = 0$$

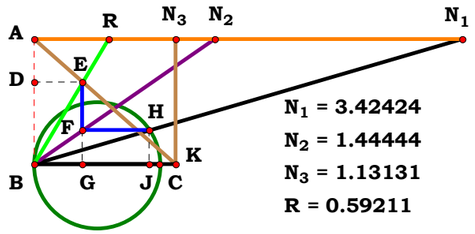
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)}{\sqrt{N_u \cdot \left(A^2 + N_u^2 - C \cdot N_u\right) \cdot \left(A^2 \cdot B - N_u^3 - A^2 \cdot N_u + B \cdot N_u^2 + C \cdot N_u^2\right)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot \left(X^2 \cdot Z + Z \cdot o^2 - X^2 \cdot q\right)}{\sqrt{Y \cdot \left(X^2 \cdot Z + Z \cdot o^2 - X^2 \cdot q\right) \cdot \left(X^2 \cdot Y \cdot q - Y \cdot Z \cdot o^2 - X^2 \cdot Y \cdot Z + X^2 \cdot Z \cdot p + Z \cdot o^2 \cdot p\right)}} = 0$$

3OBT5R3



Unit. $AB := 1$ Given. $N_1 := 3.42424$ $N_2 := 1.44444$ $N_3 := 1.13131$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

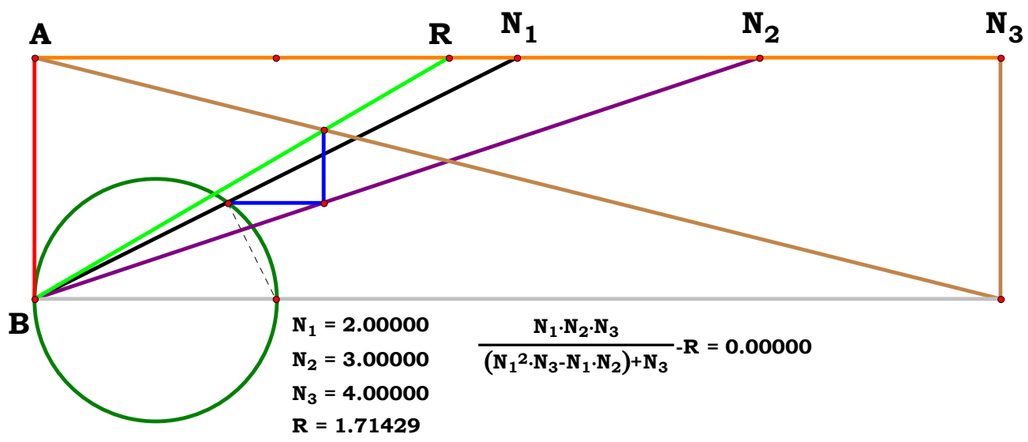
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BH := \frac{N_1 \cdot AB}{BN_1}$

$HJ := \frac{AB \cdot BH}{BN_1}$ $BG := N_2 \cdot HJ$

$EG := \frac{AB \cdot (N_3 - BG)}{N_3}$ $R := \frac{BG \cdot AB}{EG}$

$R = 0.592107$



Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_3}{N_1^2 \cdot N_3 - N_1 \cdot N_2 + N_3} = 0$$

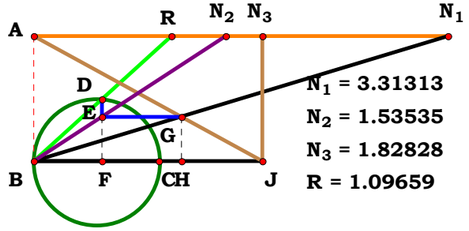
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{A \cdot N_u^2}{B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Y \cdot Z \cdot o}{Z \cdot p \cdot X^2 - Y \cdot q \cdot X \cdot o + Z \cdot p \cdot o^2} = 0$$

3OBT5R4



Unit. $AB := 1$ Given. $N_1 := 3.31313$ $N_2 := 1.53535$ $N_3 := 1.82828$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

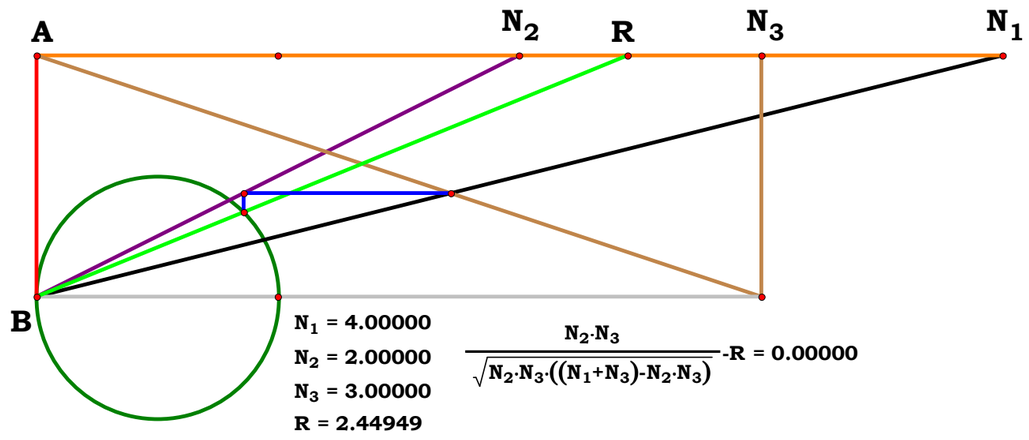
$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BH := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $GH := \frac{AB \cdot BH}{N_1}$

$BF := N_2 \cdot GH$ $DF := \sqrt{BF \cdot (AB - BF)}$

$R := \frac{BF \cdot AB}{DF}$ $R = 1.096582$



Definitions.

$$R - \frac{N_2 \cdot N_3}{\sqrt{N_2 \cdot N_3 \cdot (N_1 + N_3 - N_2 \cdot N_3)}} = 0$$

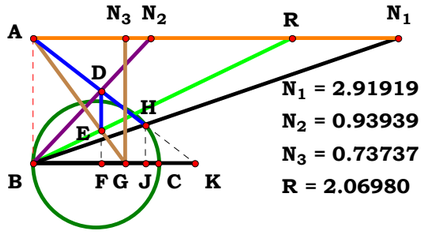
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{A} \cdot N_u}{\sqrt{N_u \cdot (A \cdot B + B \cdot C - A \cdot N_u)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{N_2 \cdot N_3}{\sqrt{N_2 \cdot N_3 \cdot (N_1 + N_3 - N_2 \cdot N_3)}} = 0$$

3OBT5R5



Unit. $AB := 1$ Given. $N_1 := 2.91919$ $N_2 := .93939$ $N_3 := .73737$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

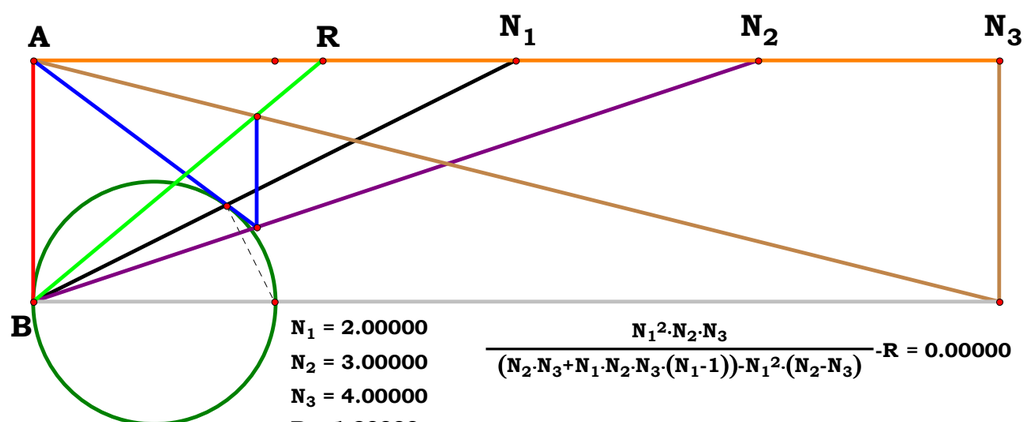
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BH := \frac{N_1 \cdot AB}{BN_1}$

$BJ := \frac{N_1 \cdot BH}{BN_1}$ $HJ := \frac{AB \cdot BJ}{N_1}$

$BK := \frac{BJ \cdot AB}{AB - HJ}$ $BF := \frac{N_2 \cdot BK}{N_2 + BK}$

$FG := N_3 - BF$ $EF := \frac{AB \cdot FG}{N_3}$

$R := \frac{BF \cdot AB}{EF}$ $R = 2.069809$



Definitions.

$$R - \frac{N_1^2 \cdot N_2 \cdot N_3}{N_2 \cdot N_3 + N_1 \cdot N_2 \cdot N_3 \cdot (N_1 - 1) - N_1^2 \cdot (N_2 - N_3)} = 0$$

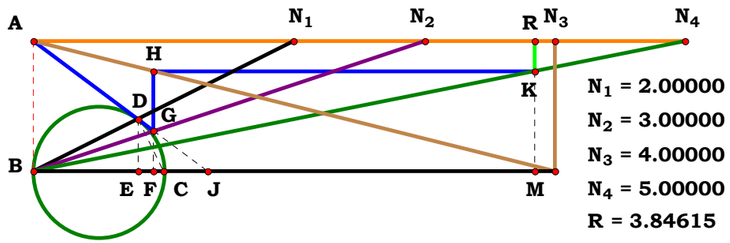
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u^2}{A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X^2 \cdot Y \cdot Z}{X^2 \cdot Y \cdot Z + Y \cdot Z \cdot o^2 - X^2 \cdot Y \cdot q + X^2 \cdot Z \cdot p - X \cdot Y \cdot Z \cdot o} = 0$$

3OBT5R6



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 3.84615$

Unit. $AB := 1$ Given. $N_1 := 2$ $N_2 := 3$ $N_3 := 4$ $N_4 := 5$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

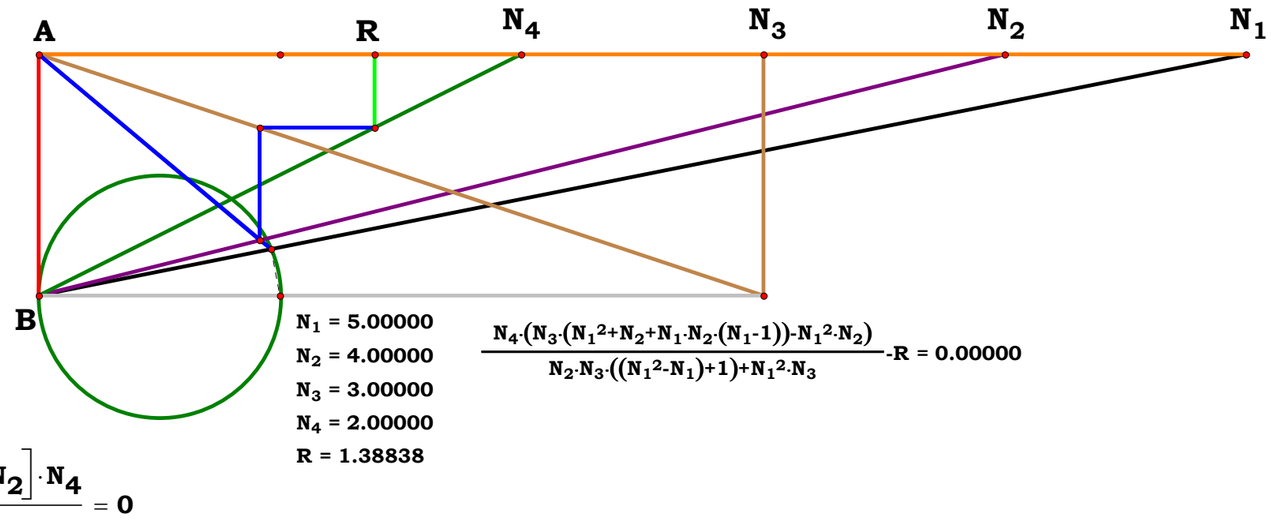
$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BG := \frac{N_1 \cdot AB}{BN_1}$$

$$DE := \frac{AB \cdot BG}{BN_1} \qquad BE := N_1 \cdot DE$$

$$BJ := \frac{BE \cdot AB}{AB - DE} \qquad BF := \frac{N_2 \cdot BJ}{N_2 + BJ}$$

$$FH := AB \cdot \frac{(N_3 - BF)}{N_3} \qquad R := N_4 \cdot FH$$

$R = 3.846154$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$

$$\frac{N_4 \cdot (N_3 \cdot (N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)) - N_1^2 \cdot N_2)}{N_2 \cdot N_3 \cdot ((N_1^2 - N_1) + 1) + N_1^2 \cdot N_3} - R = 0.00000$$

$R = 1.38838$

Definitions.

$$R - \frac{\left[N_3 \cdot \left[N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)\right] - N_1^2 \cdot N_2\right] \cdot N_4}{N_2 \cdot N_3 \cdot \left(N_1^2 - N_1 + 1\right) + N_1^2 \cdot N_3} = 0$$

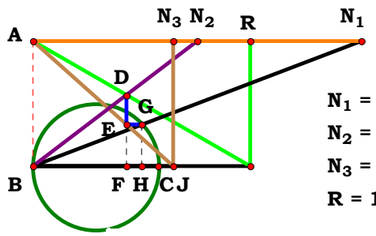
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{D \cdot \left(A^2 - A \cdot N_u + N_u^2 + B \cdot N_u\right)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{W^2 \cdot Z \cdot (X \cdot Y - X \cdot o + Y \cdot n) + X \cdot Y \cdot Z \cdot m \cdot (m - W)}{W^2 \cdot Y \cdot p \cdot (X + n) + X \cdot Y \cdot m \cdot p \cdot (m - W)} = 0$$

3OBT5R7



$N_1 = 2.62626$
$N_2 = 1.31313$
$N_3 = 1.12121$
$R = 1.73993$

Unit. $AB := 1$ Given. $N_1 := 2.62626$ $N_2 := 1.31313$ $N_3 := 1.12121$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

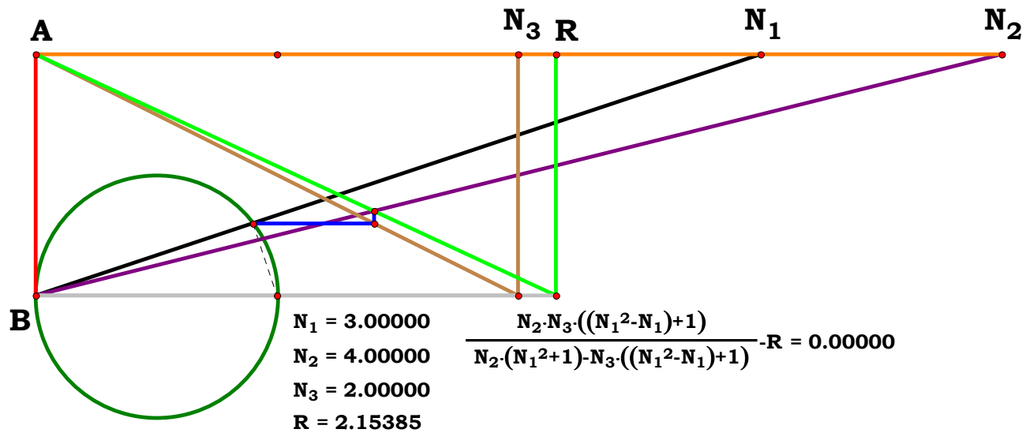
Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BG := \frac{N_1 \cdot AB}{BN_1}$$

$$GH := \frac{AB \cdot BG}{BN_1} \qquad FJ := N_3 \cdot GH$$

$$BF := N_3 - FJ \qquad DF := \frac{AB \cdot BF}{N_2}$$

$$R := \frac{BF \cdot AB}{AB - DF} \qquad R = 1.73992$$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$R = 2.15385$

$$\frac{N_2 \cdot N_3 \cdot ((N_1^2 - N_1) + 1)}{N_2 \cdot (N_1^2 + 1) - N_3 \cdot ((N_1^2 - N_1) + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 - N_1 + 1\right)}{\left(N_1^2 + 1\right) \cdot N_2 - N_3 \cdot \left(N_1^2 - N_1 + 1\right)} = 0$$

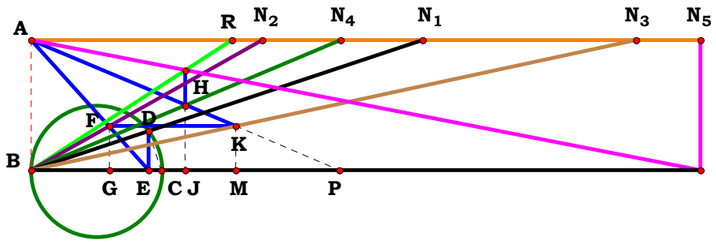
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot Z \cdot \left(X^2 - X \cdot o + o^2\right)}{X^2 \cdot Y \cdot q - X^2 \cdot Z \cdot p + Y \cdot o^2 \cdot q - Z \cdot o^2 \cdot p + X \cdot Z \cdot o \cdot p} = 0$$

3OBT5R8



$N_1 = 3.00000$
$N_2 = 1.76991$
$N_3 = 4.64163$
$N_4 = 2.37279$
$N_5 = 5.12938$
$R = 1.53806$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.76991$ $N_3 := 4.64163$ $N_4 := 2.37279$ $N_5 := 5.12938$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

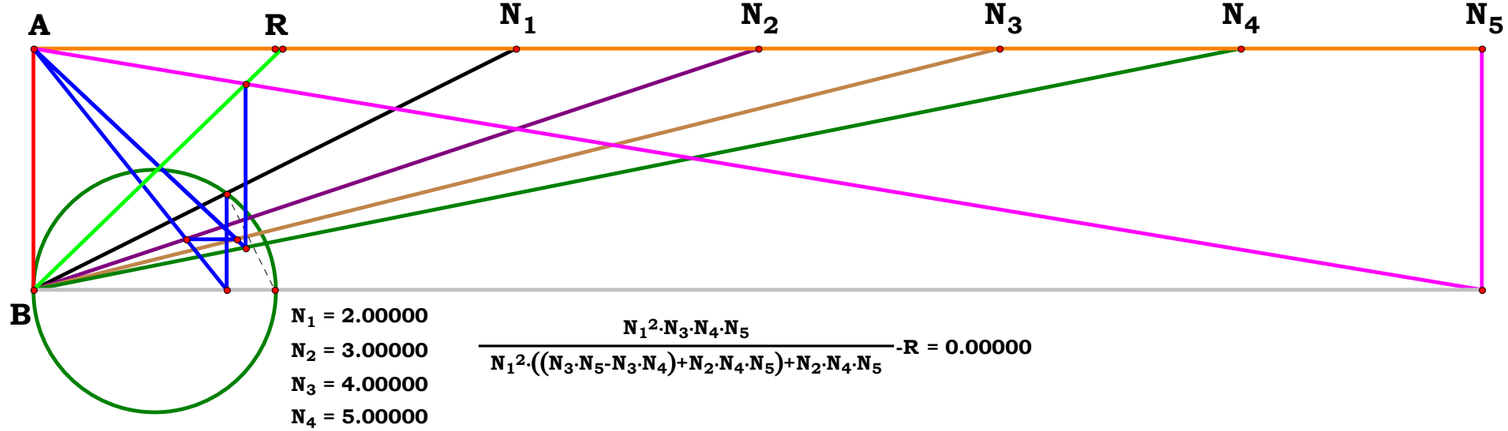
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$BE := \frac{N_1 \cdot BD}{BN_1}$ $FG := \frac{BE}{BE + N_2}$

$BM := N_3 \cdot FG$ $BP := \frac{BM \cdot AB}{AB - FG}$

$BJ := \frac{BP \cdot N_4}{BP + N_4}$ $HJ := \frac{AB \cdot (N_5 - BJ)}{N_5}$

$R := \frac{BJ}{HJ}$ $R = 1.53806$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 6.00000$
$R = 1.03004$

$\frac{N_1^2 \cdot N_3 \cdot N_4 \cdot N_5}{N_1^2 \cdot ((N_3 \cdot N_5 - N_3 \cdot N_4) + N_2 \cdot N_4 \cdot N_5) + N_2 \cdot N_4 \cdot N_5} - R = 0.00000$

Definitions.

$$R - \frac{N_1^2 \cdot N_3 \cdot N_4 \cdot N_5}{N_1^2 \cdot (N_3 \cdot N_5 - N_3 \cdot N_4 + N_2 \cdot N_4 \cdot N_5) + N_2 \cdot N_4 \cdot N_5} = 0$$

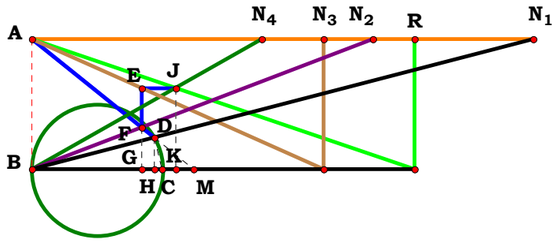
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u^2}{A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V^2 \cdot X \cdot Y \cdot Z \cdot m}{V^2 \cdot (W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o) + W \cdot Y \cdot Z \cdot n \cdot l^2} = 0$$

3OBT5R9



$N_1 = 3.84266$
$N_2 = 2.61257$
$N_3 = 2.23955$
$N_4 = 1.76258$
$R = 2.93581$

Unit. $AB := 1$ **Given.** $N_1 := 3.84266$ $N_2 := 2.61257$ $N_3 := 2.23955$ $N_4 := 1.76258$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

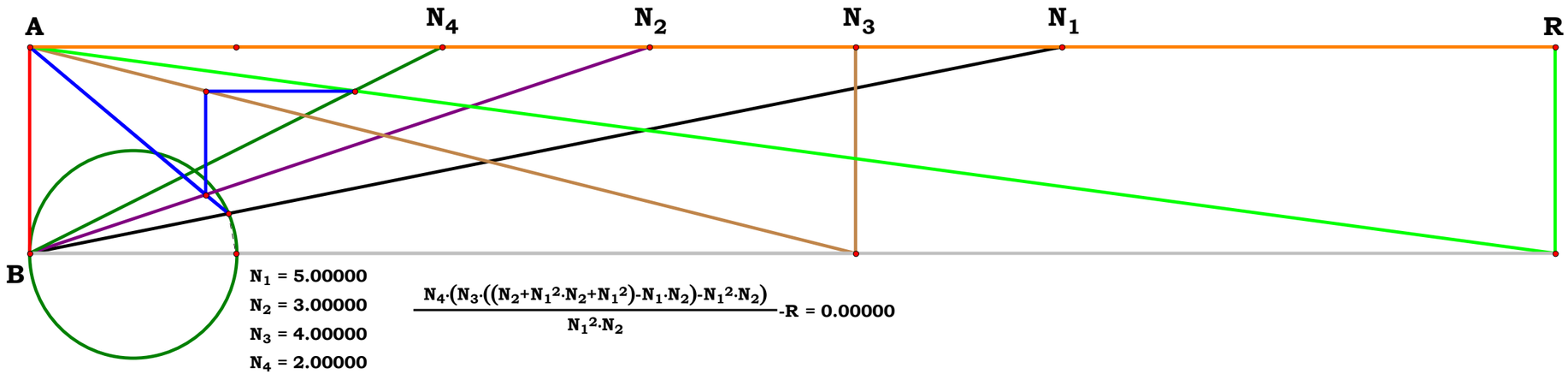
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BD := \frac{N_1 \cdot AB}{BN_1}$

$DH := \frac{AB \cdot BD}{BN_1}$ $BH := \frac{N_1 \cdot BD}{BN_1}$

$BM := \frac{BH \cdot AB}{AB - DH}$ $BG := \frac{N_2 \cdot BM}{N_2 + BM}$

$EG := \frac{N_3 - BG}{N_3}$ $BK := N_4 \cdot EG$

$R := \frac{BK}{AB - EG}$ $R = 2.935802$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 7.38667$

$$\frac{N_4 \cdot (N_3 \cdot ((N_2 + N_1^2 \cdot N_2 + N_1^2) - N_1 \cdot N_2) - N_1^2 \cdot N_2)}{N_1^2 \cdot N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot \left[N_3 \cdot \left(N_2 + N_1^2 \cdot N_2 + N_1^2 - N_1 \cdot N_2 \right) - N_1^2 \cdot N_2 \right]}{N_1^2 \cdot N_2} = 0$$

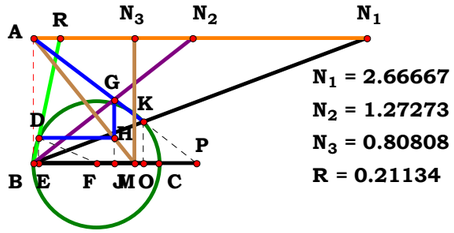
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u}{C \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot X \cdot Y \cdot Z + X \cdot Y \cdot Z \cdot m^2 - W^2 \cdot X \cdot Z \cdot o + W^2 \cdot Y \cdot Z \cdot n - W \cdot X \cdot Y \cdot Z \cdot m}{W^2 \cdot X \cdot o \cdot p} = 0$$

3OBT5R10



Unit. $AB := 1$ Given. $N_1 := 2.66667$ $N_2 := 1.27273$ $N_3 := .80808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

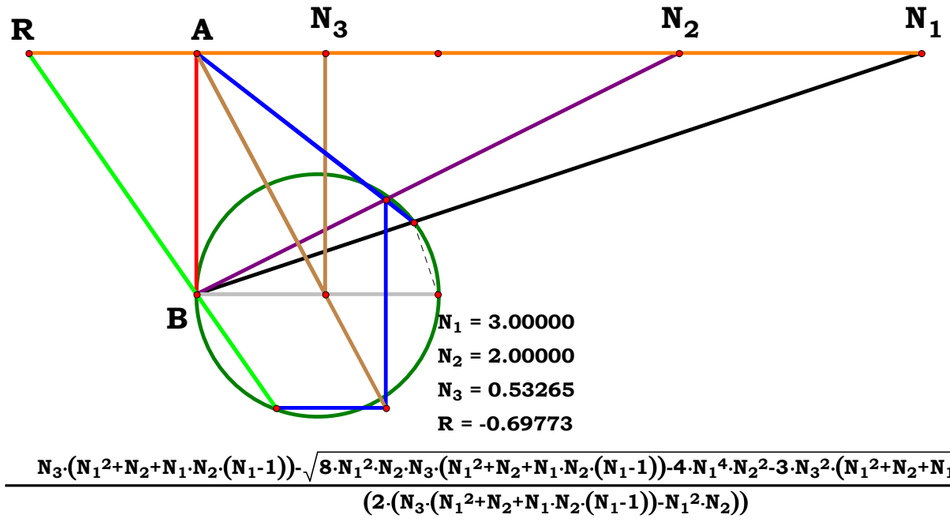
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BK := \frac{N_1 \cdot AB}{BN_1}$

$BO := \frac{N_1 \cdot BK}{BN_1}$ $KO := \frac{AB \cdot BK}{BN_1}$

$BP := \frac{BO \cdot AB}{AB - KO}$ $BJ := \frac{N_2 \cdot BP}{N_2 + BP}$

$JO := N_3 - BJ$ $HJ := \frac{AB \cdot JO}{N_3}$

$EF := \sqrt{\left(\frac{AB}{2}\right)^2 - HJ^2}$ $BE := \frac{AB}{2} - EF$



$R := \frac{BE \cdot AB}{HJ}$ $R = 0.211336$

$$\frac{N_3 \cdot (N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)) - \sqrt{8 \cdot N_1^2 \cdot N_2 \cdot N_3 \cdot (N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)) - 4 \cdot N_1^4 \cdot N_2^2 - 3 \cdot N_3^2 \cdot (N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1))^2}}{(2 \cdot (N_3 \cdot (N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)) - N_1^2 \cdot N_2))} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot \left[N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)\right] - \sqrt{8 \cdot N_1^2 \cdot N_2 \cdot N_3 \cdot \left[N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)\right] - 4 \cdot N_1^4 \cdot N_2^2 - 3 \cdot N_3^2 \cdot \left[N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)\right]^2}}{2 \cdot \left[N_3 \cdot \left[N_1^2 + N_2 + N_1 \cdot N_2 \cdot (N_1 - 1)\right] - N_1^2 \cdot N_2\right]} = 0$$

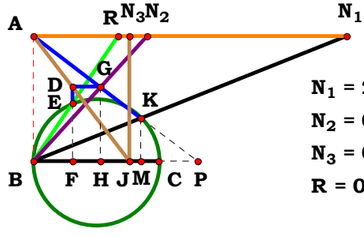
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u^4 - N_u^2 \cdot \sqrt{\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A \cdot N_u - N_u^2 - A^2 - B \cdot N_u + 2 \cdot C \cdot N_u\right)} + N_u^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{2 \cdot N_u^2 \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X^2 \cdot Y \cdot Z - \sqrt{-\left(X^2 \cdot Y \cdot Z + Y \cdot Z \cdot o^2 - 2 \cdot X^2 \cdot Y \cdot q + X^2 \cdot Z \cdot p - X \cdot Y \cdot Z \cdot o\right) \cdot \left(3 \cdot X^2 \cdot Y \cdot Z + 3 \cdot Y \cdot Z \cdot o^2 - 2 \cdot X^2 \cdot Y \cdot q + 3 \cdot X^2 \cdot Z \cdot p - 3 \cdot X \cdot Y \cdot Z \cdot o\right)} + Y \cdot Z \cdot o^2 + X^2 \cdot Z \cdot p - X \cdot Y \cdot Z \cdot o}{2 \cdot \left(X^2 \cdot Y \cdot Z + Y \cdot Z \cdot o^2 - X^2 \cdot Y \cdot q + X^2 \cdot Z \cdot p - X \cdot Y \cdot Z \cdot o\right)} = 0$$

3OBT5R11



$N_1 = 2.50505$
$N_2 = 0.90909$
$N_3 = 0.76768$
$R = 0.67611$

Unit. $AB := 1$ Given. $N_1 := 2.50505$ $N_2 := .90909$ $N_3 := .76768$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

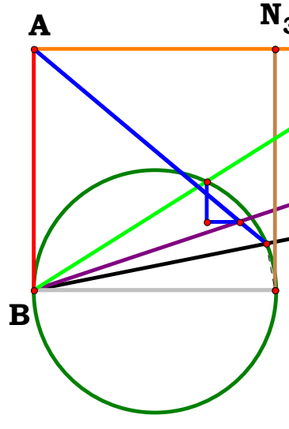
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BK := \frac{N_1 \cdot AB}{BN_1}$ $KM := \frac{AB \cdot BK}{BN_1}$

$BM := \frac{N_1 \cdot BK}{BN_1}$ $BP := \frac{BM \cdot AB}{AB - KM}$ $BH := \frac{N_2 \cdot BP}{N_2 + BP}$

$GH := \frac{AB \cdot BH}{N_2}$ $FJ := N_3 \cdot GH$ $BF := N_3 - FJ$

$EF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{EF}$ $R = 0.676107$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R = 1.58745$

$$\frac{(N_2 \cdot N_3 \cdot ((N_1^2 - N_1) + 1))}{\sqrt{(N_2 \cdot N_3 \cdot ((N_1^2 - N_1) + 1)) \cdot ((N_1^2 \cdot ((N_2 - N_2 \cdot N_3) + 1) + N_1 \cdot N_2 \cdot (N_3 - 1) + N_2) - N_2 \cdot N_3)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 - N_1 + 1\right)}{\sqrt{N_2 \cdot N_3 \cdot \left(N_1^2 - N_1 + 1\right) \cdot \left[N_1^2 \cdot \left(N_2 - N_2 \cdot N_3 + 1\right) + N_1 \cdot N_2 \cdot \left(N_3 - 1\right) + N_2 - N_2 \cdot N_3\right]}} = 0$$

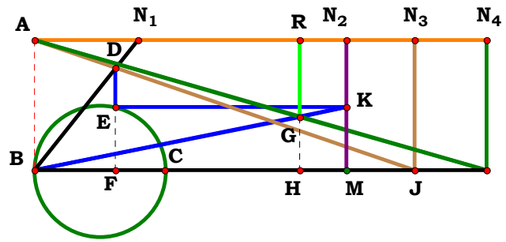
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(C \cdot A^2 - A^2 \cdot N_u + A \cdot N_u^2 - C \cdot A \cdot N_u - N_u^3 + C \cdot N_u^2 + B \cdot C \cdot N_u\right)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot \left(X^2 - X \cdot o + o^2\right)}{\sqrt{Y \cdot Z \cdot \left(X^2 - X \cdot o + o^2\right) \cdot \left(X^2 \cdot Y \cdot q - Y \cdot Z \cdot o^2 - X^2 \cdot Y \cdot Z + Y \cdot o^2 \cdot q + X^2 \cdot p \cdot q + X \cdot Y \cdot Z \cdot o - X \cdot Y \cdot o \cdot q\right)}} = 0$$

3OBT6R0



$N_1 = 0.79164$
$N_2 = 2.38980$
$N_3 = 2.91756$
$N_4 = 3.46728$
$R = 2.03568$

Unit. $AB := 1$ **Given.** $N_1 := .79164$ $N_2 := 2.38980$ $N_3 := 2.91756$ $N_4 := 3.46728$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$BF := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $EF := \sqrt{BF \cdot (AB - BF)}$

$AP := \frac{N_2 \cdot AB}{EF}$ $R := \frac{AP \cdot N_4}{AP + N_4}$

$R = 2.035677$

$Boolean := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$

Definitions.

Boolean $= 1$

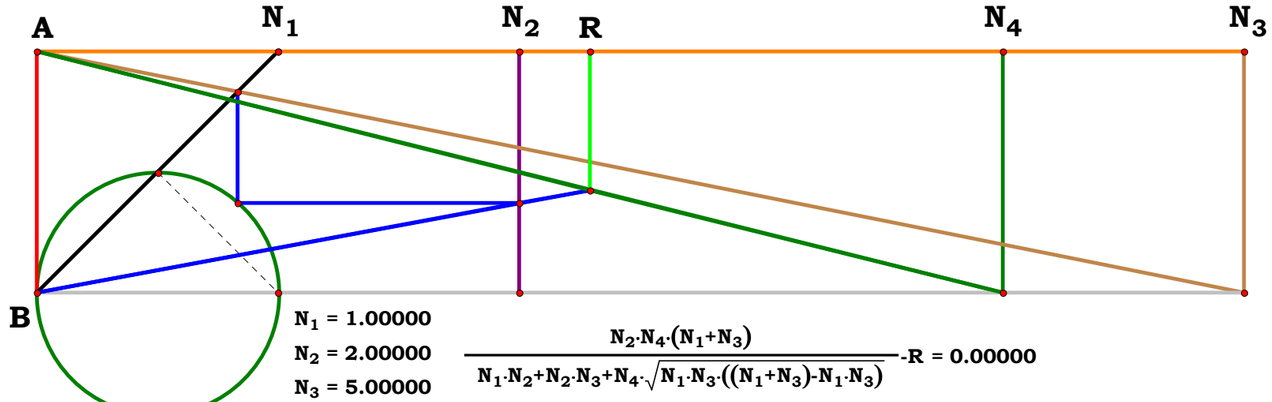
$$R - \frac{N_2 \cdot N_4 \cdot (N_1 + N_3)}{N_1 \cdot N_2 + N_2 \cdot N_3 + N_4 \cdot \sqrt{N_1 \cdot N_3 \cdot (N_1 + N_3 - N_1 \cdot N_3)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (A + C)}{B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Z \cdot (W \cdot o + Y \cdot m)}{Z \cdot n \cdot \sqrt{W \cdot Y \cdot (W \cdot o - W \cdot Y + Y \cdot m)} + W \cdot X \cdot o \cdot p + X \cdot Y \cdot m \cdot p} = 0$$

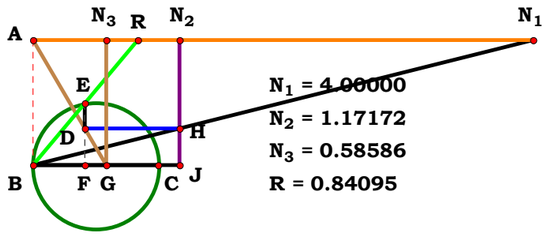


$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 5.00000$
$N_4 = 4.00000$

$$\frac{N_2 \cdot N_4 \cdot (N_1 + N_3)}{N_1 \cdot N_2 + N_2 \cdot N_3 + N_4 \cdot \sqrt{N_1 \cdot N_3 \cdot ((N_1 + N_3) - N_1 \cdot N_3)}} - R = 0.00000$$

$R = 2.29180$

3OBT6R1



Unit. $AB := 1$ Given. $N_1 := 4.00000$ $N_2 := 1.17172$ $N_3 := .58586$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$HJ := \frac{N_2}{N_1}$ $BF := N_3 \cdot (AB - HJ)$

$EF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.840949$

Definitions.

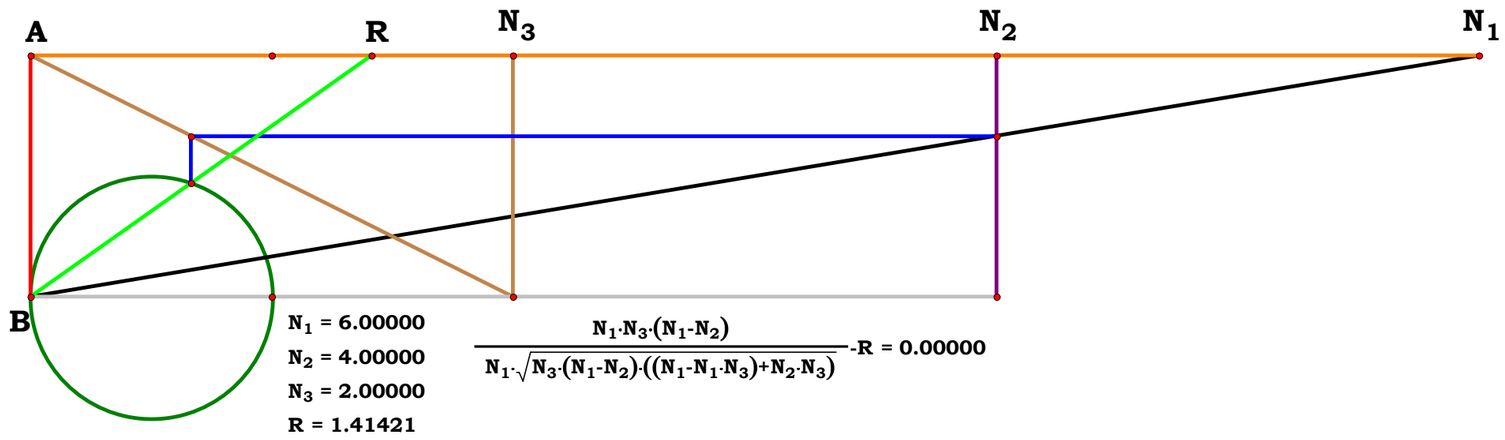
$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_2)}{N_1 \cdot \sqrt{N_3 \cdot (N_1 - N_2) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

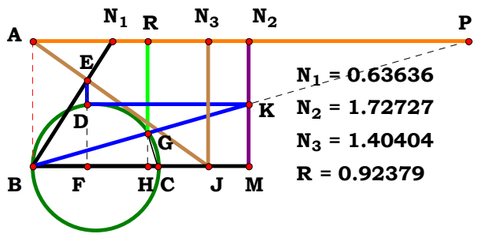
$$R - \frac{N_u \cdot (B - A)}{\sqrt{N_u \cdot (B - A) \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot (X \cdot p - Y \cdot o)}{\sqrt{Z \cdot (X \cdot p - Y \cdot o) \cdot (Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q)}} = 0$$



3OBT6R2



Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 1.72727$ $N_3 := 1.40404$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

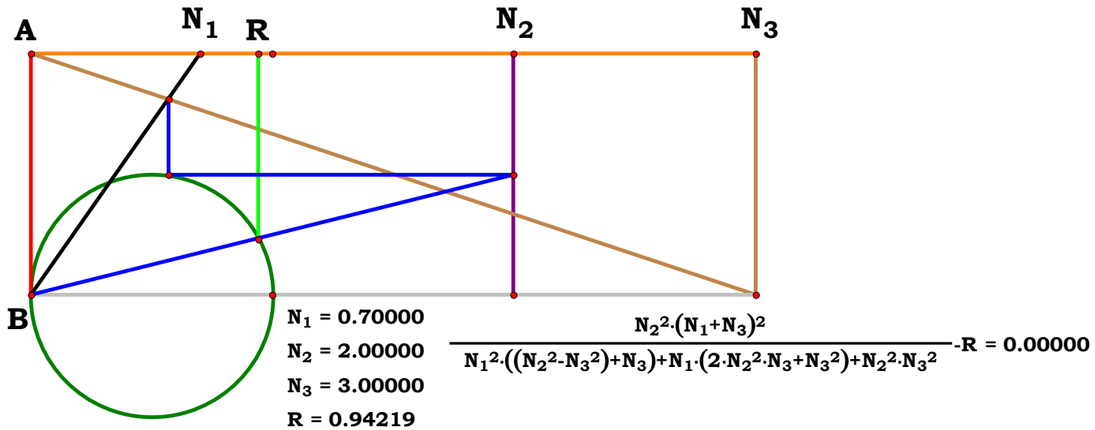
$$BF := \frac{N_1 \cdot N_3}{N_1 + N_3} \qquad DF := \sqrt{BF \cdot (AB - BF)}$$

$$AP := \frac{N_2 \cdot AB}{DF} \qquad BP := \sqrt{AP^2 + AB^2}$$

$$BG := \frac{AP \cdot AB}{BP} \qquad R := \frac{AP \cdot BG}{BP}$$

$R = 0.923786$

$$Boolean := \frac{DF^2 + \sqrt{DF^4}}{2\sqrt{DF^4}}$$



Definitions.

$Boolean = 1$

$$R - \frac{N_2^2 \cdot (N_1 + N_3)^2}{(N_2^2 - N_3^2 + N_3) \cdot N_1^2 + (2 \cdot N_2^2 \cdot N_3 + N_3^2) \cdot N_1 + N_2^2 \cdot N_3^2} = 0$$

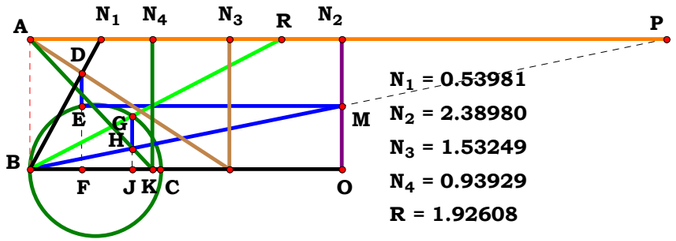
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + C)^2}{N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y^2 \cdot (X \cdot q + Z \cdot o)^2}{X^2 \cdot (Y^2 \cdot q^2 - Z^2 \cdot p^2 + Z \cdot p^2 \cdot q) + X \cdot Z \cdot o \cdot (2 \cdot q \cdot Y^2 + Z \cdot p^2) + Y^2 \cdot Z^2 \cdot o^2} = 0$$

3OBT6R3



Unit. $AB := 1$ Given. $N_1 := .53981$ $N_2 := 2.38980$ $N_3 := 1.53249$ $N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

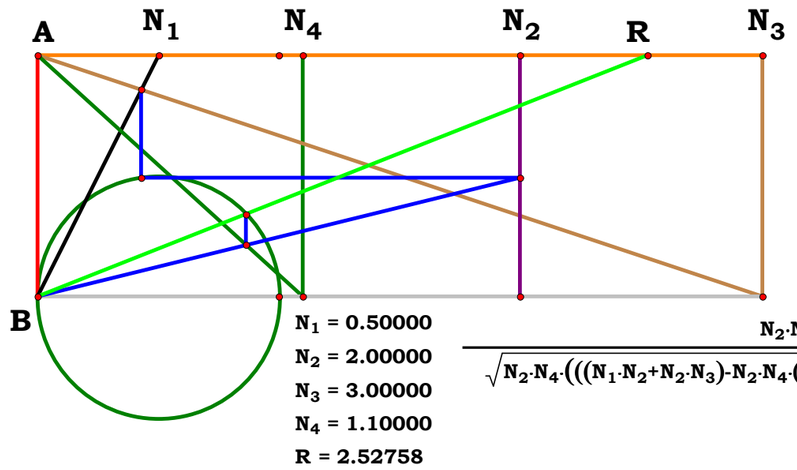
$BF := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $EF := \sqrt{BF \cdot (AB - BF)}$

$AP := \frac{N_2 \cdot AB}{EF}$ $BJ := \frac{AP \cdot N_4}{AP + N_4}$

$GJ := \sqrt{BJ \cdot (AB - BJ)}$ $R := \frac{BJ \cdot AB}{GJ}$

$R = 1.92607$

$Boolean := \frac{BJ^2 + \sqrt{BJ^4}}{2\sqrt{BJ^4}}$



$\frac{N_2 \cdot N_4 \cdot \sqrt{N_1 + N_3}}{\sqrt{N_2 \cdot N_4 \cdot (((N_1 \cdot N_2 + N_2 \cdot N_3) - N_2 \cdot N_4 \cdot (N_1 + N_3)) + N_4 \cdot \sqrt{N_1 \cdot N_3 \cdot ((N_1 + N_3) - N_1 \cdot N_3)})}} - R = 0.00000$

Definitions.

Boolean $= 1$

$R - \frac{N_2 \cdot N_4 \cdot \sqrt{N_1 + N_3}}{\sqrt{N_2 \cdot N_4 \cdot \left[N_1 \cdot N_2 + N_2 \cdot N_3 + N_4 \cdot \sqrt{N_1 \cdot N_3 \cdot (N_1 + N_3 - N_1 \cdot N_3)} - N_2 \cdot N_4 \cdot (N_1 + N_3)\right]}} = 0$

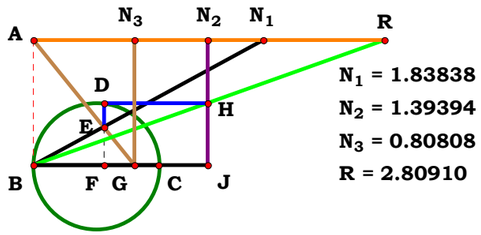
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{\sqrt{N_u \cdot (A + C)}}{\sqrt{B \cdot \sqrt{A \cdot N_u - N_u^2} + C \cdot N_u + (A + C) \cdot (D - N_u)}} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Z \cdot \sqrt{W \cdot o + Y \cdot m}}{\sqrt{X \cdot Z \cdot \left[Z \cdot n \cdot \sqrt{W \cdot Y \cdot (W \cdot o - W \cdot Y + Y \cdot m)} - W \cdot X \cdot Z \cdot o - X \cdot Y \cdot Z \cdot m + W \cdot X \cdot o \cdot p + X \cdot Y \cdot m \cdot p\right]}} = 0$

3OBT6R4



$N_1 = 1.83838$
$N_2 = 1.39394$
$N_3 = 0.80808$
$R = 2.80910$

Unit. $AB := 1$ Given. $N_1 := 1.83838$ $N_2 := 1.39394$ $N_3 := .80808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BF := \frac{N_1 \cdot N_3}{N_1 + N_3} \qquad DF := \sqrt{BF \cdot (AB - BF)}$$

$$R := \frac{N_2 \cdot AB}{DF} \qquad R = 2.809098$$

$$Boolean := \frac{DF^2 + \sqrt{DF^4}}{2\sqrt{DF^4}}$$

Definitions.

$Boolean = 1$

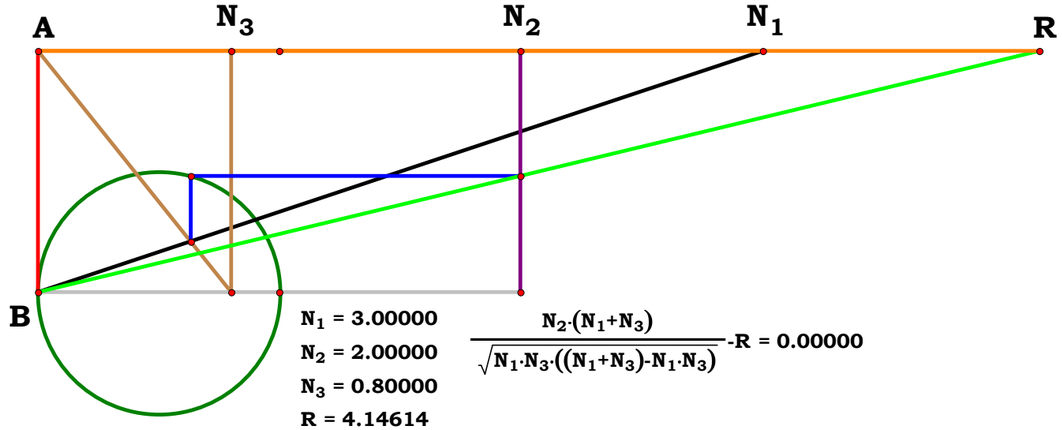
$$R - \frac{N_2 \cdot (N_1 + N_3)}{\sqrt{N_1 \cdot N_3 \cdot (N_1 + N_3 - N_1 \cdot N_3)}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A + C)}{B \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

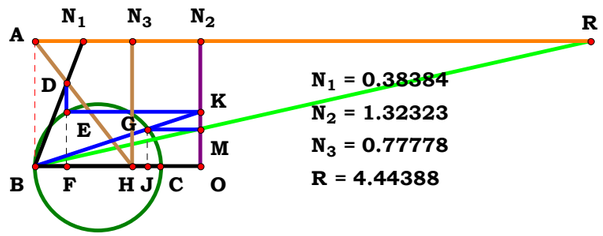
$$R - \frac{Y \cdot (X \cdot q + Z \cdot o)}{p \cdot \sqrt{X \cdot Z \cdot (X \cdot q - X \cdot Z + Z \cdot o)}} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.80000$
$R = 4.14614$

$$\frac{N_2 \cdot (N_1 + N_3)}{\sqrt{N_1 \cdot N_3 \cdot ((N_1 + N_3) - N_1 \cdot N_3)}} - R = 0.00000$$

3OBT6R5



$N_1 = 0.38384$
$N_2 = 1.32323$
$N_3 = 0.77778$
$R = 4.44388$

Unit. $AB := 1$ Given. $N_1 := .38384$ $N_2 := 1.32323$ $N_3 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BF := \frac{N_1 \cdot N_3}{N_1 + N_3} \qquad EF := \sqrt{BF \cdot (AB - BF)}$$

$$BK := \sqrt{N_2^{\,2} + EF^2} \qquad BG := \frac{N_2 \cdot AB}{BK}$$

$$GJ := \frac{EF \cdot BG}{BK} \qquad R := \frac{N_2 \cdot AB}{GJ}$$

$R = 4.443864$

$$\text{Boolean} := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$$

Definitions.

$\text{Boolean} = 1$

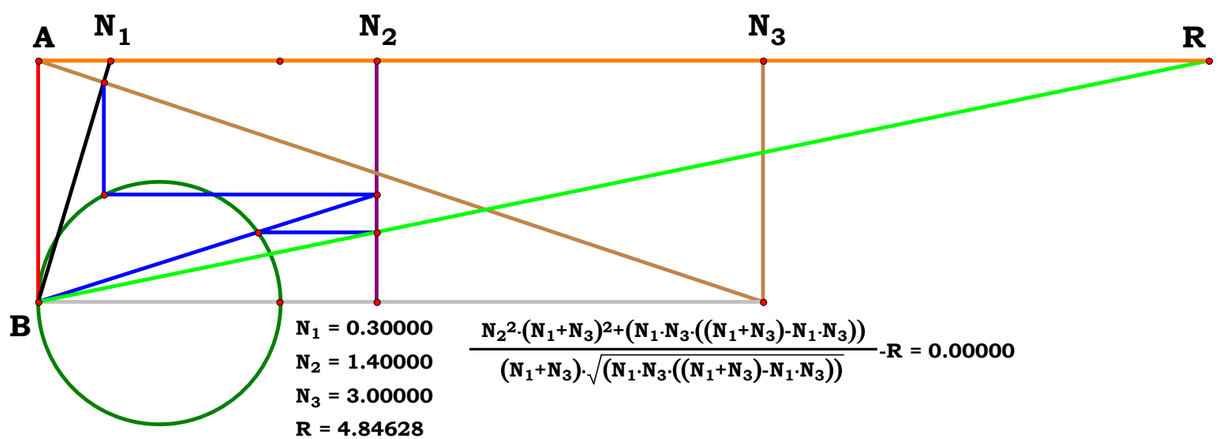
$$R - \frac{N_2^{\,2} \cdot (N_1 + N_3)^2 + N_1 \cdot N_3 \cdot (N_1 + N_3 - N_1 \cdot N_3)}{(N_1 + N_3) \cdot \sqrt{N_1 \cdot N_3 \cdot (N_1 + N_3 - N_1 \cdot N_3)}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left[N_u \cdot (A - B + C) \cdot (A + B + C) + B^2 \cdot (A + C) \right]}{B^2 \cdot (A + C) \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

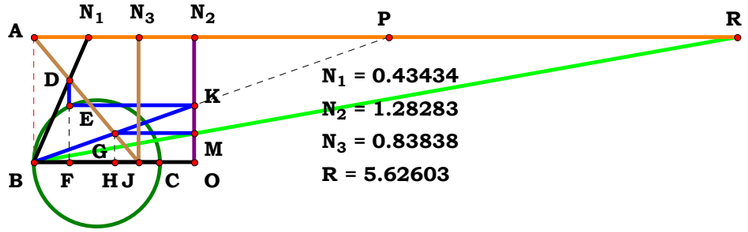
$$R - \frac{X^2 \cdot Y^2 \cdot q^2 - X^2 \cdot Z^2 \cdot p^2 + X^2 \cdot Z \cdot p^2 \cdot q + 2 \cdot X \cdot Y^2 \cdot Z \cdot o \cdot q + X \cdot Z^2 \cdot o \cdot p^2 + Y^2 \cdot Z^2 \cdot o^2}{p^2 \cdot (X \cdot q + Z \cdot o) \cdot \sqrt{X \cdot Z \cdot (X \cdot q - X \cdot Z + Z \cdot o)}} = 0$$



$N_1 = 0.30000$
$N_2 = 1.40000$
$N_3 = 3.00000$
$R = 4.84628$

$$\frac{N_2^{\,2} \cdot (N_1 + N_3)^2 + (N_1 \cdot N_3 \cdot ((N_1 + N_3) - N_1 \cdot N_3))}{(N_1 + N_3) \cdot \sqrt{(N_1 \cdot N_3 \cdot ((N_1 + N_3) - N_1 \cdot N_3))}} - R = 0.00000$$

3OBT6R6



Unit. $AB := 1$ **Given.** $N_1 := .43434$ $N_2 := 1.28283$ $N_3 := .83838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

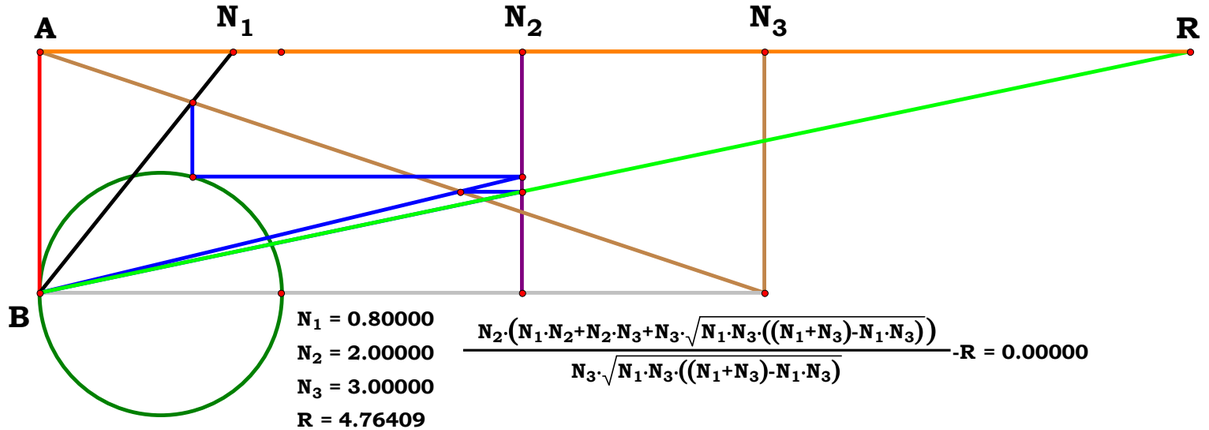
$BF := \frac{N_1 \cdot N_3}{N_1 + N_3}$ $EF := \sqrt{BF \cdot (AB - BF)}$

$AP := \frac{N_2}{EF}$ $BH := \frac{AP \cdot N_3}{AP + N_3}$

$GH := \frac{AB \cdot BH}{AP}$ $R := \frac{N_2}{GH}$

$R = 5.626069$

$Boolean := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$



Definitions.

$Boolean = 1$

$$R - \frac{N_2 \cdot \left[N_1 \cdot N_2 + N_2 \cdot N_3 + N_3 \cdot \sqrt{N_1 \cdot N_3 \cdot \left(N_1 + N_3 - N_1 \cdot N_3\right)}\right]}{N_3 \cdot \sqrt{N_1 \cdot N_3 \cdot \left(N_1 + N_3 - N_1 \cdot N_3\right)}} = 0$$

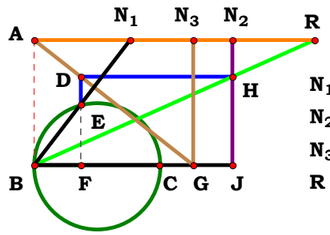
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left[B \cdot \sqrt{N_u \cdot \left(A + C - N_u\right)} + C^2 + A \cdot C\right]}{B^2 \cdot \sqrt{N_u \cdot \left(A + C - N_u\right)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot \left[Z \cdot p \cdot \sqrt{X \cdot Z \cdot (X \cdot q - X \cdot Z + Z \cdot o)} + X \cdot Y \cdot q^2 + Y \cdot Z \cdot o \cdot q\right]}{Z \cdot p^2 \cdot \sqrt{X \cdot Z \cdot (X \cdot q - X \cdot Z + Z \cdot o)}} = 0$$

3OBT6R7



$N_1 = 0.76768$
$N_2 = 1.58586$
$N_3 = 1.27273$
$R = 2.23784$

Unit. $AB := 1$ Given. $N_1 := .76768$ $N_2 := 1.58586$ $N_3 := 1.27273$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad BE := \frac{N_1 \cdot AB}{BN_1}$$

$$BF := \frac{N_1 \cdot BE}{BN_1} \qquad DF := \frac{AB \cdot (N_3 - BF)}{N_3}$$

$$R := \frac{N_2 \cdot AB}{DF} \qquad R = 2.237849$$

Definitions.

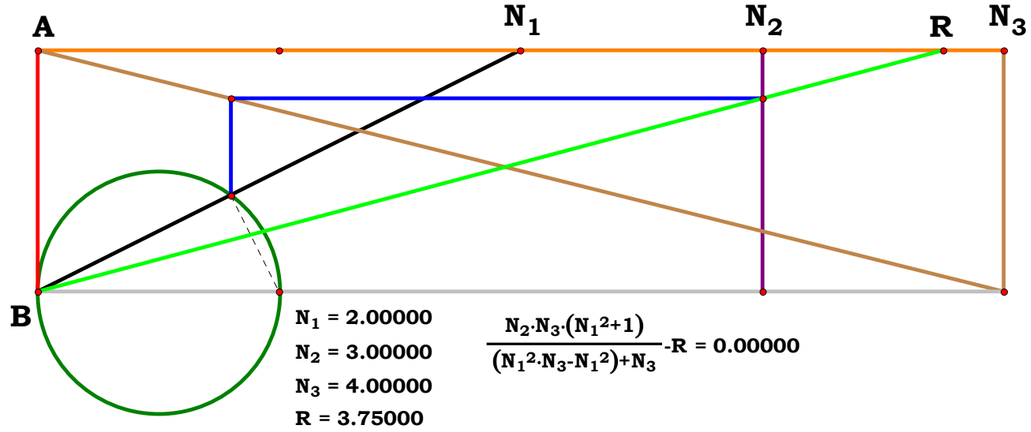
$$R - \frac{N_2 \cdot N_3 \cdot (N_1^2 + 1)}{N_1^2 \cdot N_3 - N_1^2 + N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A^2 + N_u^2)}{B \cdot (A^2 + N_u^2 - C \cdot N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

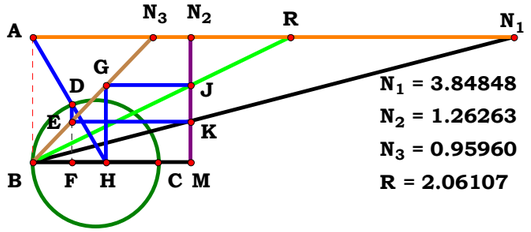
$$R - \frac{Y \cdot Z \cdot (X^2 + o^2)}{X^2 \cdot Z \cdot p + Z \cdot o^2 \cdot p - X^2 \cdot p \cdot q} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 3.75000$

$\frac{N_2 \cdot N_3 \cdot (N_1^2+1)}{(N_1^2 \cdot N_3 - N_1^2) + N_3} - R = 0.00000$

3OBT7R0



Unit. $AB := 1$ **Given.** $N_1 := 3.84848$ $N_2 := 1.26263$ $N_3 := .95960$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

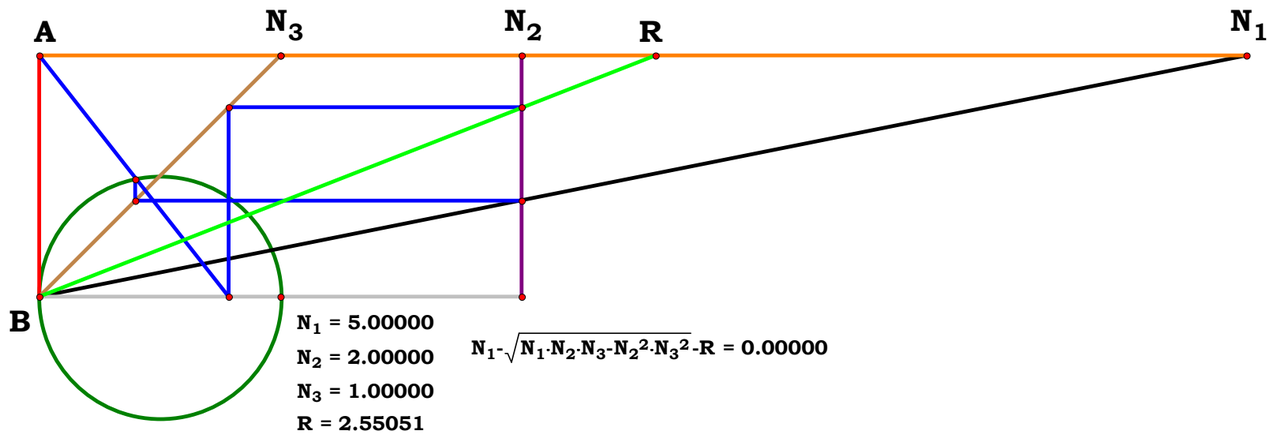
$KM := \frac{N_2}{N_1}$ $BF := N_3 \cdot KM$

$DF := \sqrt{BF \cdot (AB - BF)}$ $BH := \frac{BF \cdot AB}{AB - DF}$

$GH := \frac{AB \cdot BH}{N_3}$ $R := \frac{N_2 \cdot AB}{GH}$

$R = 2.06106$

$Boolean := \frac{DF^2 + \sqrt{DF^4}}{2\sqrt{DF^4}}$



Definitions.

Boolean $= 1$

$R - \left(N_1 - \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}\right) = 0$

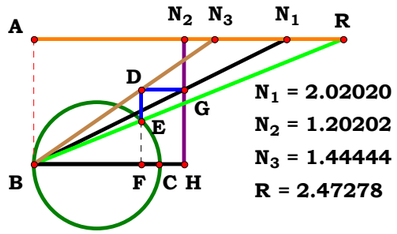
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \left[B \cdot C - \sqrt{N_u \cdot A \cdot (B \cdot C - A \cdot N_u)}\right]}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{X \cdot p \cdot q - \sqrt{o} \cdot \sqrt{Y \cdot Z \cdot (X \cdot p \cdot q - Y \cdot Z \cdot o)}}{o \cdot p \cdot q} = 0$

3OBT7R1



Unit. $AB := 1$ **Given.** $N_1 := 2.02020$ $N_2 := 1.20202$ $N_3 := 1.44444$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$GH := \frac{N_2}{N_1}$ $BF := N_3 \cdot GH$

$EF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{EF}$

$R = 2.472757$

Definitions.

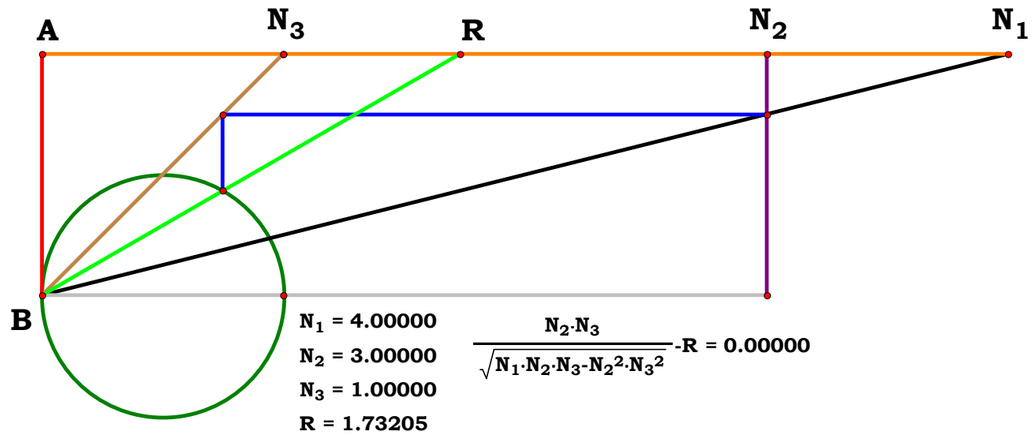
$$R - \frac{N_2 \cdot N_3}{\sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

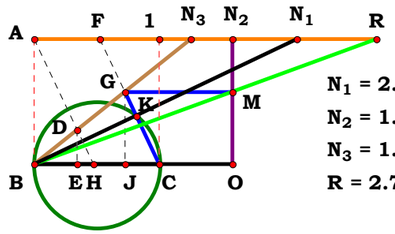
$$R - \frac{\sqrt{A} \cdot N_u}{\sqrt{N_u \cdot (B \cdot C - A \cdot N_u)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot \sqrt{o}}{\sqrt{-Y \cdot Z \cdot (Y \cdot Z \cdot o - X \cdot p \cdot q)}} = 0$$



3OBT7R2



$N_1 = 2.10101$
$N_2 = 1.58586$
$N_3 = 1.25253$
$R = 2.74114$

Unit. $AB := 1$ **Given.** $N_1 := 2.10101$ $N_2 := 1.58586$ $N_3 := 1.25253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

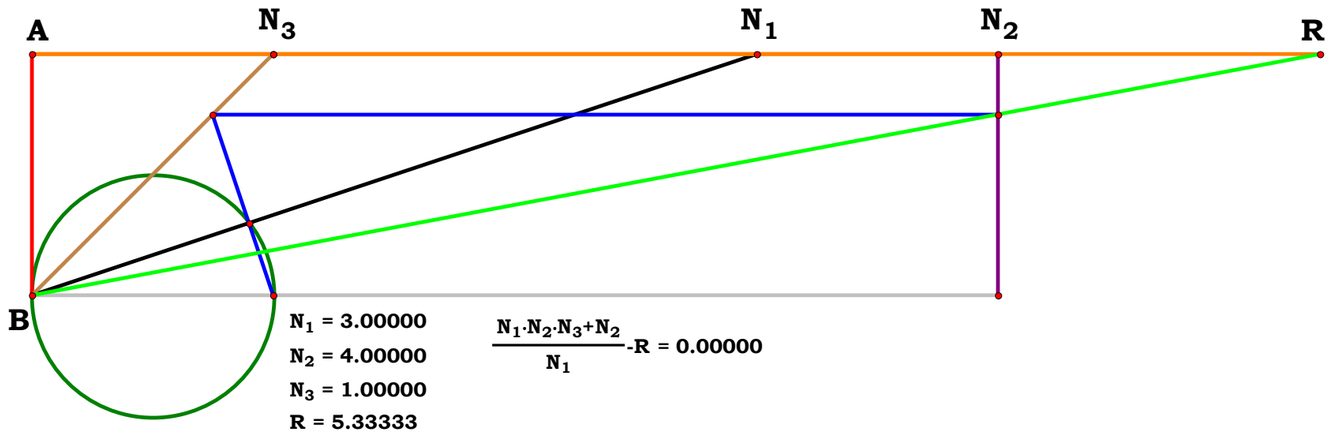
Descriptions.

$F1 := \frac{AB^2}{N_1}$ $BH := F1$

$BE := \frac{N_3 \cdot BH}{N_3 + BH}$ $BJ := \frac{BE \cdot AB}{BH}$

$GJ := \frac{AB \cdot BJ}{N_3}$ $R := \frac{N_2 \cdot AB}{GJ}$

$R = 2.741146$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 1.00000$
$R = 5.33333$

$\frac{N_1 \cdot N_2 \cdot N_3 + N_2}{N_1} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_3 + N_2}{N_1} = 0$

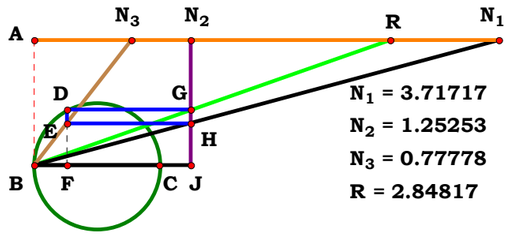
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u^2 + A \cdot C}{B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot o \cdot q + X \cdot Y \cdot Z}{X \cdot p \cdot q} = 0$

3OBT7R3



Unit. $AB := 1$ **Given.** $N_1 := 3.71717$ $N_2 := 1.25253$ $N_3 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$HJ := \frac{N_2}{N_1}$ $BF := N_3 \cdot HJ$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{N_2 \cdot AB}{DF}$

$R = 2.848177$

$Boolean := \frac{DF^2 + \sqrt{DF^4}}{2\sqrt{DF^4}}$

Definitions.

$Boolean = 1$

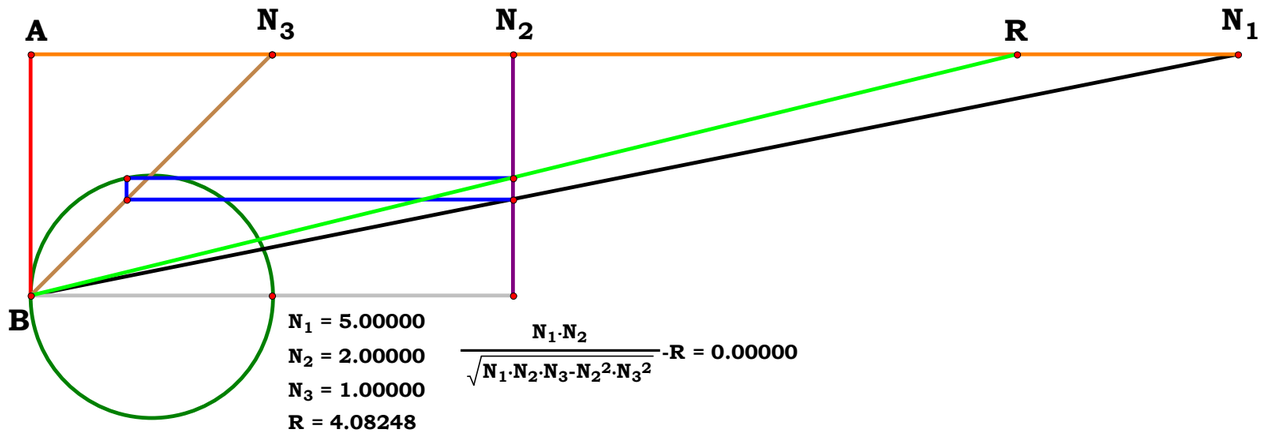
$$R - \frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

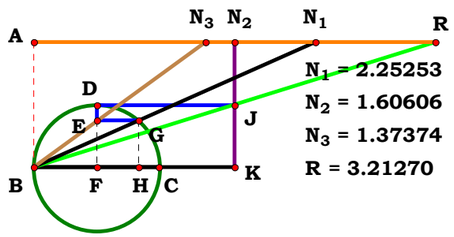
$$R - \frac{C \cdot N_u}{\sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Y \cdot q}{\sqrt{o} \cdot \sqrt{-Y \cdot Z \cdot (Y \cdot Z \cdot o - X \cdot p \cdot q)}} = 0$$



3OBT7R4



Unit. $AB := 1$ Given. $N_1 := 2.25253$ $N_2 := 1.60606$ $N_3 := 1.37374$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

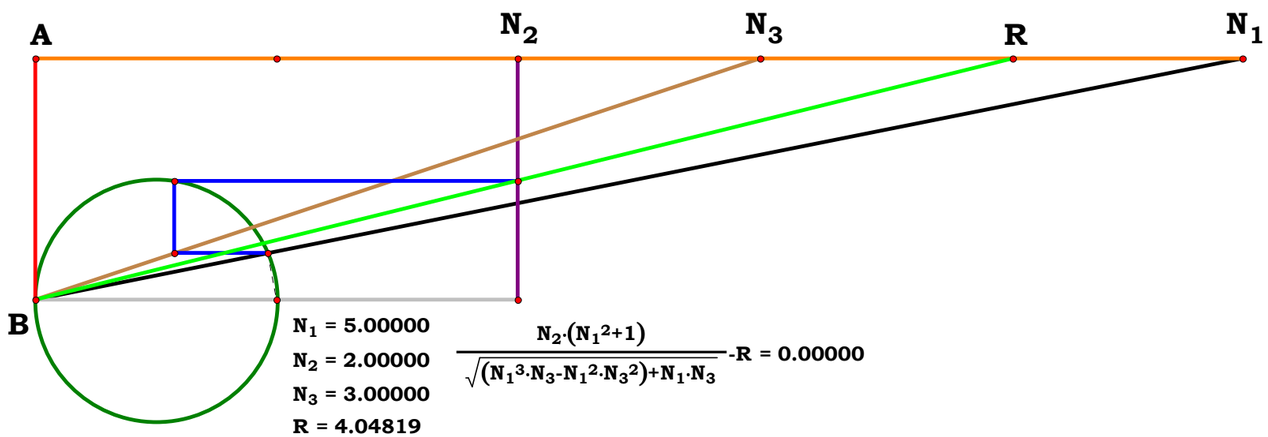
Descriptions.

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1 \cdot AB}{BN_1}$

$GH := \frac{AB \cdot BG}{BN_1}$ $BF := N_3 \cdot GH$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{N_2 \cdot AB}{DF}$

$R = 3.212695$



Definitions.

$$R - \frac{N_2 \cdot \left(N_1^2 + 1\right)}{\sqrt{N_1^3 \cdot N_3 - N_1^2 \cdot N_3^2 + N_1 \cdot N_3}} = 0$$

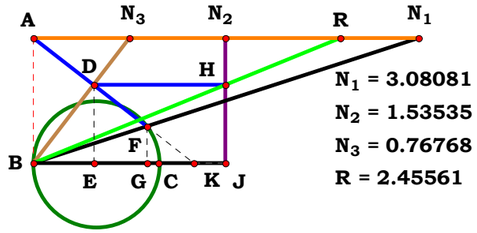
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{C \cdot \left(A^2 + N_u^2\right)}{B \cdot \sqrt{A \cdot \left(C \cdot A^2 - A \cdot N_u^2 + C \cdot N_u^2\right)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot q \cdot \left(X^2 + o^2\right)}{\sqrt{o} \cdot p \cdot \sqrt{X \cdot Z \cdot \left(q \cdot X^2 - Z \cdot X \cdot o + q \cdot o^2\right)}} = 0$$

3OBT7R5



$N_1 = 3.08081$
$N_2 = 1.53535$
$N_3 = 0.76768$
$R = 2.45561$

Unit. $AB := 1$ **Given.** $N_1 := 3.08081$ $N_2 := 1.53535$ $N_3 := .76768$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

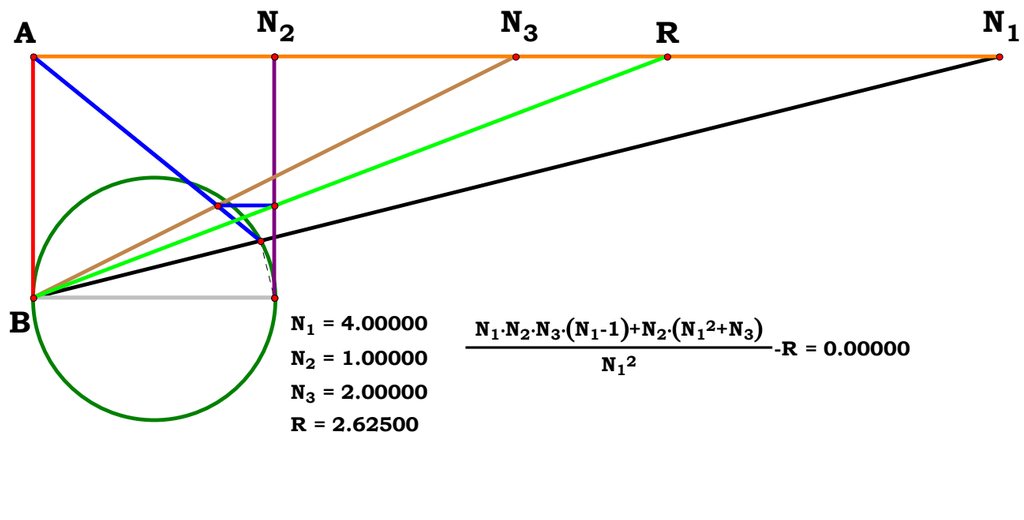
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BF := \frac{N_1 \cdot AB}{BN_1}$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BF}{BN_1}$

$BK := \frac{BG \cdot AB}{AB - FG}$ $BE := \frac{N_3 \cdot BK}{N_3 + BK}$

$DE := \frac{AB \cdot BE}{N_3}$ $R := \frac{N_2 \cdot AB}{DE}$

$R = 2.455609$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$R = 2.62500$

$\frac{N_1 \cdot N_2 \cdot N_3 \cdot (N_1 - 1) + N_2 \cdot (N_1^2 + N_3)}{N_1^2} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot N_3 \cdot (N_1 - 1) + N_2 \cdot (N_1^2 + N_3)}{N_1^2} = 0$

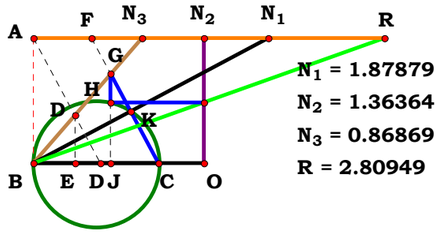
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A^2 - A \cdot N_u + N_u^2 + C \cdot N_u}{B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{X^2 \cdot Y \cdot Z + Y \cdot Z \cdot o^2 + X^2 \cdot Y \cdot q - X \cdot Y \cdot Z \cdot o}{X^2 \cdot p \cdot q} = 0$

3OBT7R6



Unit. $AB := 1$ Given. $N_1 := 1.87879$ $N_2 := 1.36364$ $N_3 := .86869$

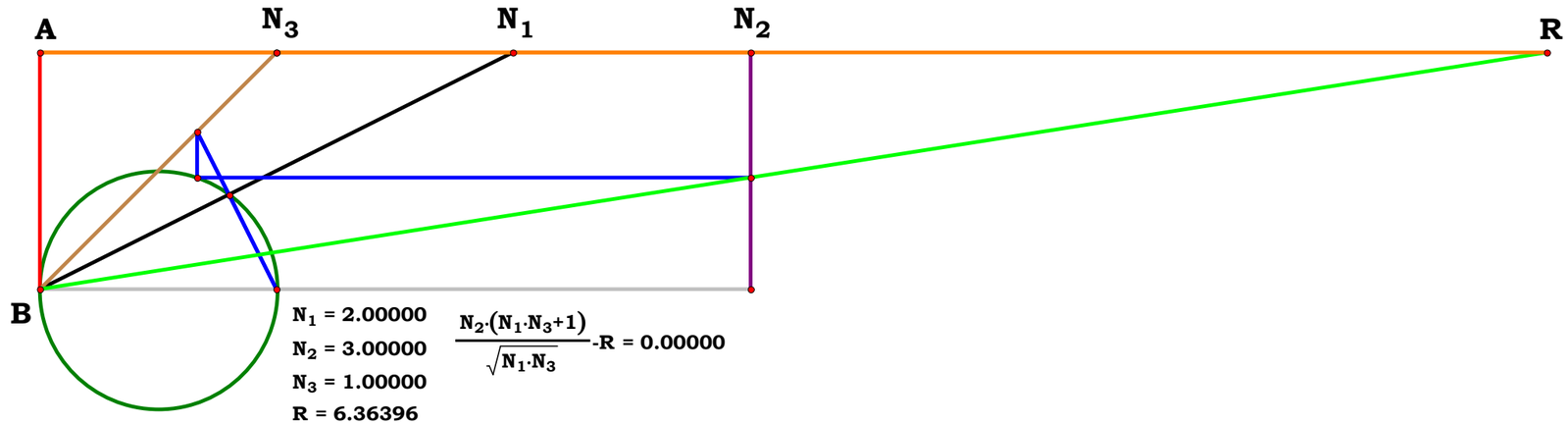
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BD := \frac{AB^2}{N_1}$ $BE := \frac{N_3 \cdot BD}{N_3 + BD}$

$BJ := \frac{BE \cdot AB}{BD}$ $HJ := \sqrt{BJ \cdot (AB - BJ)}$

$R := \frac{N_2 \cdot AB}{HJ}$ $R = 2.809495$



Definitions.

$R - \frac{N_2 \cdot (N_1 \cdot N_3 + 1)}{\sqrt{N_1 \cdot N_3}} = 0$

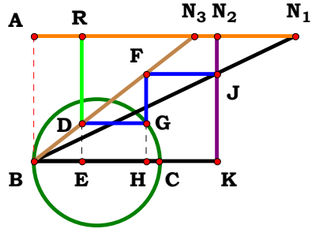
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{A \cdot C} \cdot (N_u^2 + A \cdot C)}{A \cdot B \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot (X \cdot Z + o \cdot q) \cdot \sqrt{o \cdot q}}{o \cdot p \cdot q \cdot \sqrt{X \cdot Z}} = 0$

3OBT7R7



$N_1 = 2.09091$
$N_2 = 1.46465$
$N_3 = 1.28283$
$R = 0.38723$

Unit. $AB := 1$ Given. $N_1 := 2.09091$ $N_2 := 1.46465$ $N_3 := 1.28283$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$JK := \frac{N_2}{N_1}$ $BH := N_3 \cdot JK$

$GH := \sqrt{BH \cdot (AB - BH)}$ $R := N_3 \cdot GH$

$R = 0.387228$

$Boolean := \frac{GH^2 + \sqrt{GH^4}}{2\sqrt{GH^4}}$

Definitions.

$Boolean = 1$

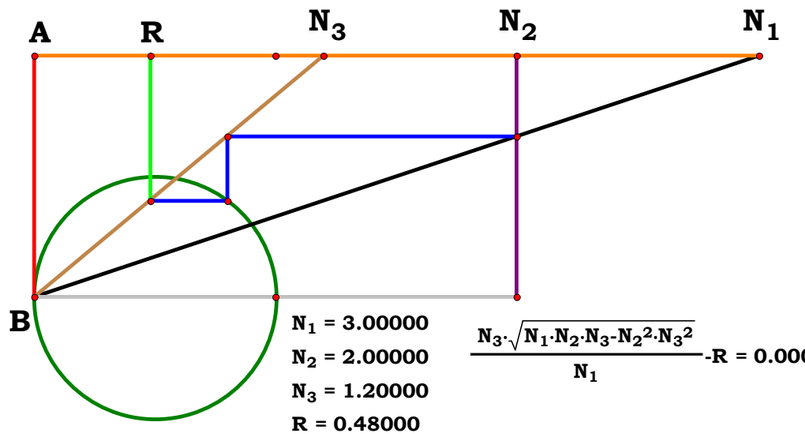
$R - \frac{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}}{N_1} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{B \cdot C^2} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

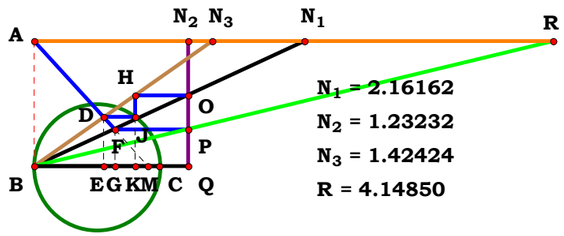
$R - \frac{Z \cdot \sqrt{o} \cdot \sqrt{-Y \cdot Z \cdot (Y \cdot Z \cdot o - X \cdot p \cdot q)}}{X \cdot p \cdot q^2} = 0$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.20000$
$R = 0.48000$

$\frac{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}}{N_1} - R = 0.00000$

3OBT7R8



Unit. $AB := 1$ **Given.** $N_1 := 2.16162$ $N_2 := 1.23232$ $N_3 := 1.42424$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

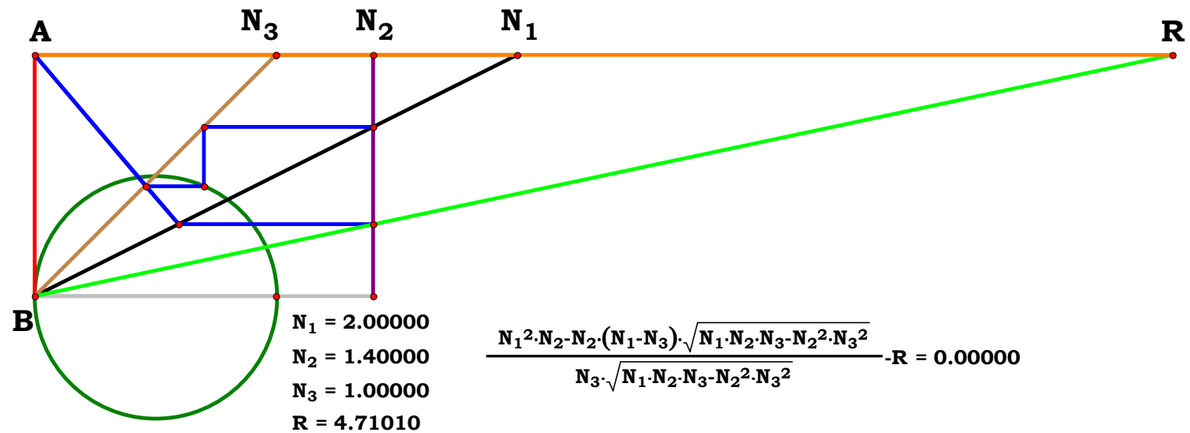
$OQ := \frac{N_2}{N_1}$ $BK := N_3 \cdot OQ$

$JK := \sqrt{BK \cdot (AB - BK)}$ $BE := N_3 \cdot JK$

$BM := \frac{BE \cdot AB}{AB - JK}$ $BG := \frac{N_1 \cdot BM}{N_1 + BM}$

$FG := \frac{AB \cdot BG}{N_1}$ $R := \frac{N_2 \cdot AB}{FG}$

$R = 4.148451$



$\frac{N_1^2 \cdot N_2 - N_2 \cdot (N_1 - N_3) \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}}{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}} - R = 0.00000$

Definitions.

$$R - \frac{N_1^2 \cdot N_2 - N_2 \cdot (N_1 - N_3) \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}}{N_3 \cdot \sqrt{N_1 \cdot N_2 \cdot N_3 - N_2^2 \cdot N_3^2}} = 0$$

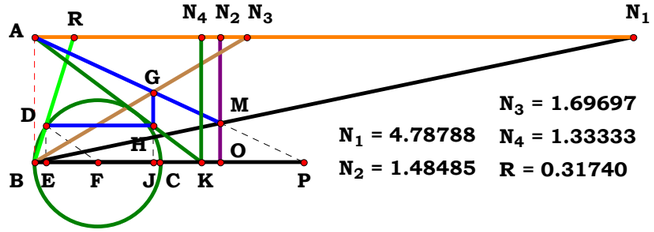
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} \cdot (A - C) + B \cdot C^2\right]}{A \cdot B \cdot \sqrt{A \cdot (B \cdot C \cdot N_u - A \cdot N_u^2)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot \left[X^2 \cdot p \cdot q^2 - \sqrt{X \cdot Y \cdot Z \cdot p \cdot q - Y^2 \cdot Z^2 \cdot o} \cdot \sqrt{o} \cdot (X \cdot q - Z \cdot o)\right]}{Z \cdot o^{\frac{3}{2}} \cdot p \cdot \sqrt{X \cdot Y \cdot Z \cdot p \cdot q - Y^2 \cdot Z^2 \cdot o}} = 0$$

3OBT8R0



Unit. $AB := 1$ Given. $N_1 := 4.78788$ $N_2 := 1.48485$ $N_3 := 1.69697$ $N_4 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

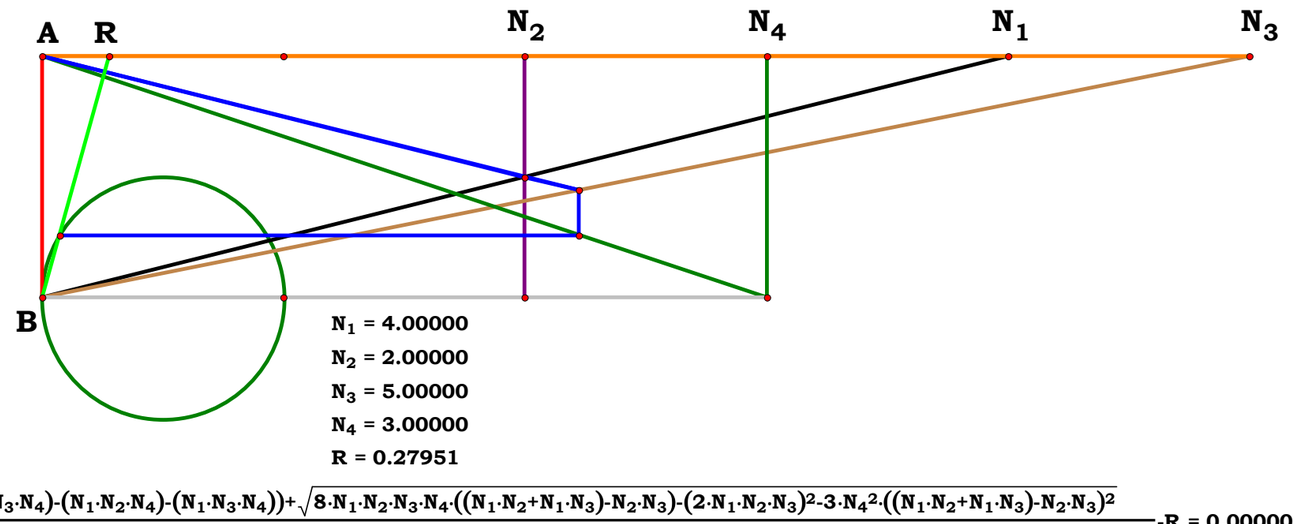
$MO := \frac{N_2}{N_1}$ $BP := \frac{N_2 \cdot AB}{AB - MO}$

$BJ := \frac{N_3 \cdot BP}{N_3 + BP}$ $JK := N_4 - BJ$

$HJ := \frac{AB \cdot JK}{N_4}$ $EF := \sqrt{\left(\frac{AB}{2}\right)^2 - HJ^2}$

$BE := \frac{AB}{2} - EF$ $R := \frac{BE \cdot AB}{HJ}$

$R = 0.317401$



$Boolean := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$

$$\frac{((N_2 \cdot N_3 \cdot N_4) - (N_1 \cdot N_2 \cdot N_4) - (N_1 \cdot N_3 \cdot N_4)) + \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3) - (2 \cdot N_1 \cdot N_2 \cdot N_3)^2 - 3 \cdot N_4^2 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)^2}}{(2 \cdot ((N_1 \cdot N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_4 - N_1 \cdot N_3 \cdot N_4) + N_2 \cdot N_3 \cdot N_4))} - R = 0.00000$$

Definitions.

Boolean $= 1$

$$R - \frac{\sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3) - 4 \cdot N_1^2 \cdot N_2^2 \cdot N_3^2 - 3 \cdot N_4^2 \cdot (N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)^2} - N_1 \cdot N_2 \cdot N_4 - N_1 \cdot N_3 \cdot N_4 + N_2 \cdot N_3 \cdot N_4}{2 \cdot (N_1 \cdot N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_4 - N_1 \cdot N_3 \cdot N_4 + N_2 \cdot N_3 \cdot N_4)} = 0$$

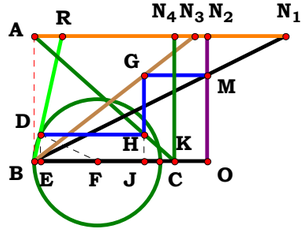
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A - B - C + \sqrt{(B - A + C - 2 \cdot D) \cdot (3 \cdot A - 3 \cdot B - 3 \cdot C + 2 \cdot D)}}{2 \cdot (A - B - C + D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{(W \cdot X \cdot Z \cdot o - 2 \cdot W \cdot X \cdot Y \cdot p + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m) \cdot (2 \cdot W \cdot X \cdot Y \cdot p - 3 \cdot W \cdot X \cdot Z \cdot o - 3 \cdot W \cdot Y \cdot Z \cdot n + 3 \cdot X \cdot Y \cdot Z \cdot m)} - W \cdot X \cdot Z \cdot o - W \cdot Y \cdot Z \cdot n + X \cdot Y \cdot Z \cdot m}{2 \cdot (W \cdot X \cdot Y \cdot p - W \cdot X \cdot Z \cdot o - W \cdot Y \cdot Z \cdot n + X \cdot Y \cdot Z \cdot m)} = 0$$

3OBT8R1



$N_1 = 2.01010$
$N_2 = 1.38384$
$N_3 = 1.28283$
$N_4 = 1.12121$
$R = 0.22287$

Unit. $AB := 1$ **Given.** $N_1 := 2.01010$ $N_2 := 1.38384$ $N_3 := 1.28283$ $N_4 := 1.12121$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

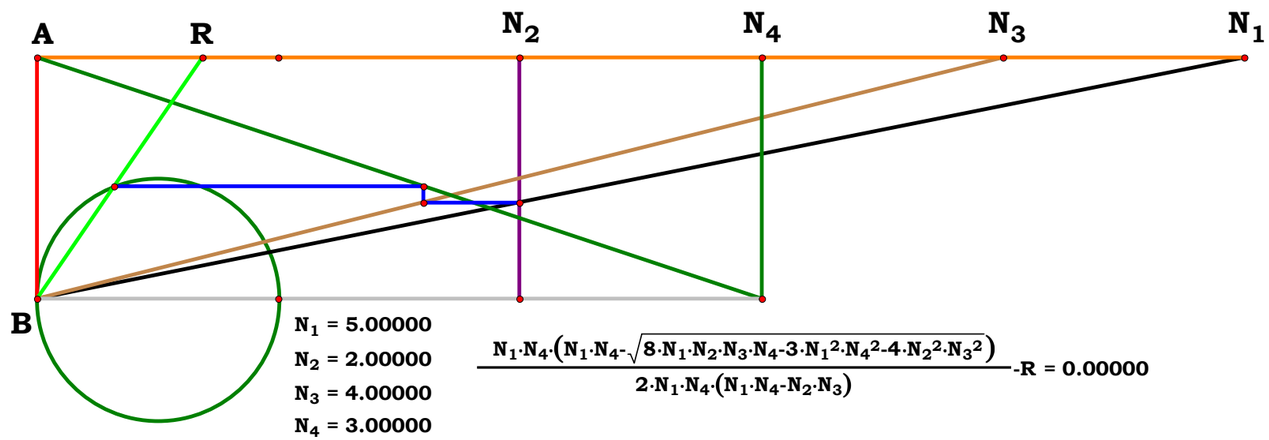
$MO := \frac{N_2}{N_1}$ $BJ := N_3 \cdot MO$

$CJ := N_4 - BJ$ $HJ := \frac{AB \cdot CJ}{N_4}$

$EF := \sqrt{\left(\frac{AB}{2}\right)^2 - HJ^2}$ $BE := \frac{AB}{2} - EF$

$R := \frac{BE \cdot AB}{HJ}$ $R = 0.222865$

$Boolean := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 0.68677$

$$\frac{N_1 \cdot N_4 \cdot \left(N_1 \cdot N_4 - \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2}\right)}{2 \cdot N_1 \cdot N_4 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} - R = 0.00000$$

Definitions.

Boolean $= 1$

$$R - \frac{N_1 \cdot N_4 \cdot \left(N_1 \cdot N_4 - \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2}\right)}{2 \cdot \left(N_1 \cdot N_4\right) \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} = 0$$

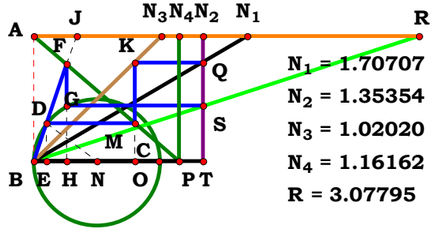
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C}{2 \cdot (A \cdot D - B \cdot C)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot o - \sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)}}{2 \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p)} = 0$$

3OBT8R2



Unit. $AB := 1$ **Given.** $N_1 := 1.70707$ $N_2 := 1.35354$ $N_3 := 1.02020$ $N_4 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$QT := \frac{N_2}{N_1}$ $BO := N_3 \cdot QT$ $OP := N_4 - BO$

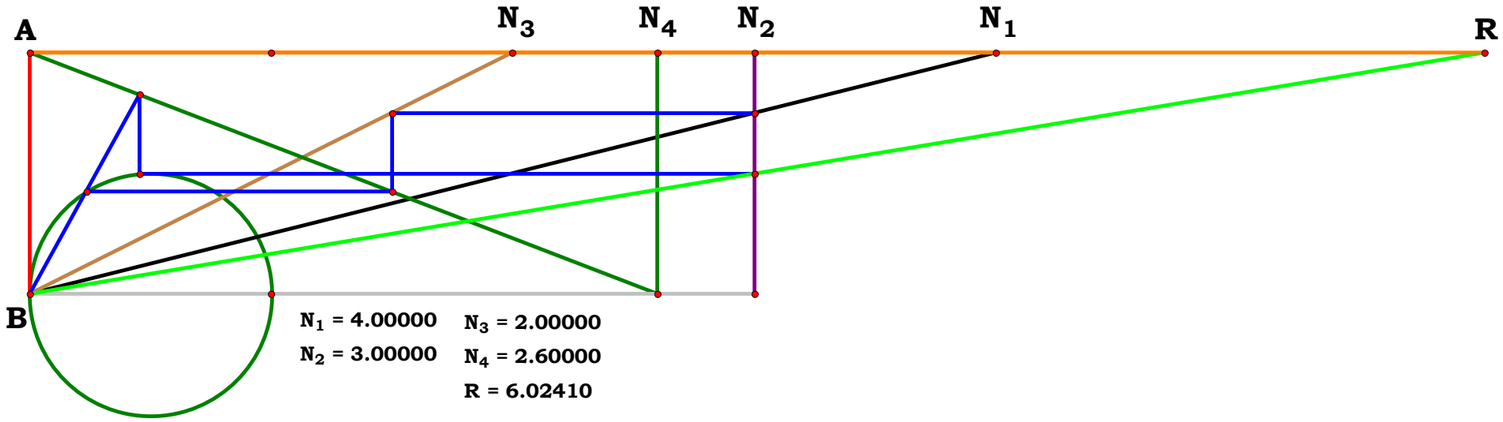
$MO := \frac{AB \cdot OP}{N_4}$ $EN := \sqrt{\left(\frac{AB}{2}\right)^2 - MO^2}$

$BE := \frac{AB}{2} - EN$ $AJ := \frac{BE \cdot AB}{MO}$

$BH := \frac{AJ \cdot N_4}{AJ + N_4}$ $GH := \sqrt{BH \cdot (AB - BH)}$

$R := \frac{N_2 \cdot AB}{GH}$ $R = 3.077953$

$Boolean := \frac{EN^2 + \sqrt{EN^4}}{2\sqrt{EN^4}}$



$$\frac{((N_1 \cdot N_2 \cdot N_4) \cdot ((((2 \cdot N_1 \cdot N_4^2) - \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}) + (N_1 \cdot N_4)) - (2 \cdot N_2 \cdot N_3 \cdot N_4)))}{\sqrt{(((N_1^4 \cdot N_4^6 + N_1^3 \cdot N_4^5 \cdot (N_1 - 2 \cdot N_2 \cdot N_3)) - (2 \cdot N_1^2 \cdot N_4^4 \cdot (N_1 - N_2 \cdot N_3)) \cdot \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}) + (N_1^2 \cdot N_4^3 \cdot (N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4))) - (N_1^2 \cdot N_4^4 \cdot (N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4))}} - R = 0.00000$$

Definitions.

Boolean $= 1$

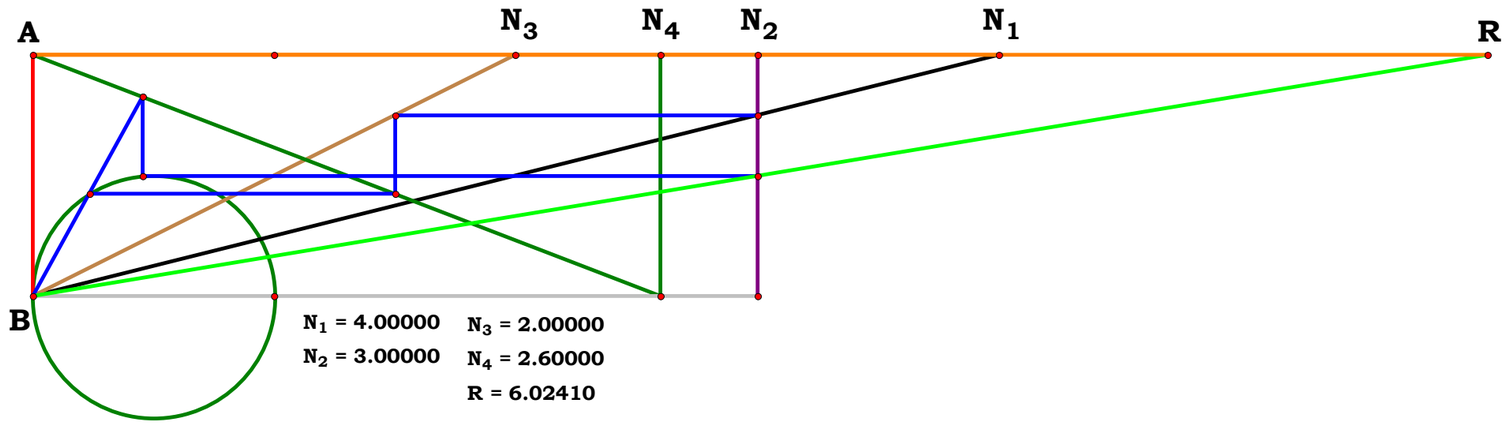
$$R - \frac{N_1 \cdot N_2 \cdot N_4 \cdot \left[2 \cdot N_1 \cdot N_4^2 - \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)} + N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3 \cdot N_4\right]}{\sqrt{2 \cdot N_1^2 \cdot N_4^3 \cdot \left(\begin{array}{l} 2 \cdot N_1^2 \cdot N_4^3 - 2 \cdot N_2^2 \cdot N_3^2 - N_1^2 \cdot N_4^2 - N_1 \cdot N_4 \cdot \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2} \ \ldots \\ + \ 2 \cdot N_2^2 \cdot N_3^2 \cdot N_4 + 4 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 + N_2 \cdot N_3 \cdot N_4 \cdot \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2} - 5 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4^2 \end{array}\right)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{2} \cdot N_u^2 \cdot \left[B \cdot C \cdot D - D \cdot \sqrt{8 \cdot A \cdot B \cdot C \cdot D - 4 \cdot A^2 \cdot D^2 - 3 \cdot B^2 \cdot C^2} - 2 \cdot N_u \cdot (A \cdot D - B \cdot C)\right]}{2 \cdot B \cdot \sqrt{2 \cdot A \cdot D^2 \cdot N_u^3 \cdot (2 \cdot B \cdot C + A \cdot N_u) - D \cdot N_u^3 \cdot \left[B^2 \cdot C^2 + \sqrt{(2 \cdot A \cdot D - 3 \cdot B \cdot C) \cdot (B \cdot C - 2 \cdot A \cdot D)} \cdot (B \cdot C - A \cdot N_u) + 5 \cdot A \cdot B \cdot C \cdot N_u\right] - 2 \cdot N_u^3 \cdot (A^2 \cdot D^3 - B^2 \cdot C^2 \cdot N_u)}} = 0$$

$W := 20 \quad X := 19 \quad Y := 18 \quad Z := 17 \quad m := \frac{W}{N_1} \quad n := \frac{X}{N_2} \quad o := \frac{Y}{N_3} \quad p := \frac{Z}{N_4}$

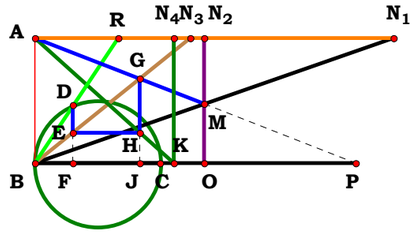
$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$



$$\frac{((N_1 \cdot N_2 \cdot N_4) \cdot ((((2 \cdot N_1 \cdot N_4^2) - \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}) + (N_1 \cdot N_4)) - (2 \cdot N_2 \cdot N_3 \cdot N_4)))}{\sqrt{(((N_1^4 \cdot N_4^6 + N_1^3 \cdot N_4^5 \cdot (N_1 - 2 \cdot N_2 \cdot N_3)) - (2 \cdot N_1^2 \cdot N_4^4 \cdot (N_1 - N_2 \cdot N_3)) \cdot \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}) + (N_1^2 \cdot N_4^3 \cdot (N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4))) - (N_1^2 \cdot N_4^4 \cdot (N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4))}} - R = 0.00000$$

$$R - \frac{\sqrt{2} \cdot W \cdot X \cdot Z \cdot \left(2 \cdot W \cdot Z^2 \cdot n \cdot o - p \cdot \sqrt{8 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot n \cdot o \cdot p - 3 \cdot W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot p^2} - 2 \cdot X \cdot Y \cdot Z \cdot m \cdot p + W \cdot Z \cdot n \cdot o \cdot p\right)}{2 \cdot n \cdot \sqrt{\begin{matrix} W^2 \cdot Z^3 \cdot \left(2 \cdot W^2 \cdot Z^3 \cdot n^2 \cdot o^2 - W^2 \cdot Z^2 \cdot n^2 \cdot o^2 \cdot p - 5 \cdot W \cdot X \cdot Y \cdot Z^2 \cdot m \cdot n \cdot o \cdot p + 4 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot n \cdot o \cdot p^2 + 2 \cdot X^2 \cdot Y^2 \cdot Z \cdot m^2 \cdot p^2 - 2 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot p^3\right) \ldots \\ + \ W^2 \cdot Z^3 \cdot (X \cdot Y \cdot Z \cdot m \cdot p - W \cdot Z \cdot n \cdot o \cdot p) \cdot \sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)} \end{matrix}}} = 0$$

3OBT8R3



$N_1 = 2.86869$
$N_2 = 1.35354$
$N_3 = 1.24242$
$N_4 = 1.11111$
$R = 0.66524$

Unit. $AB := 1$ **Given.** $N_1 := 2.86869$ $N_2 := 1.35354$ $N_3 := 1.24242$ $N_4 := 1.11111$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

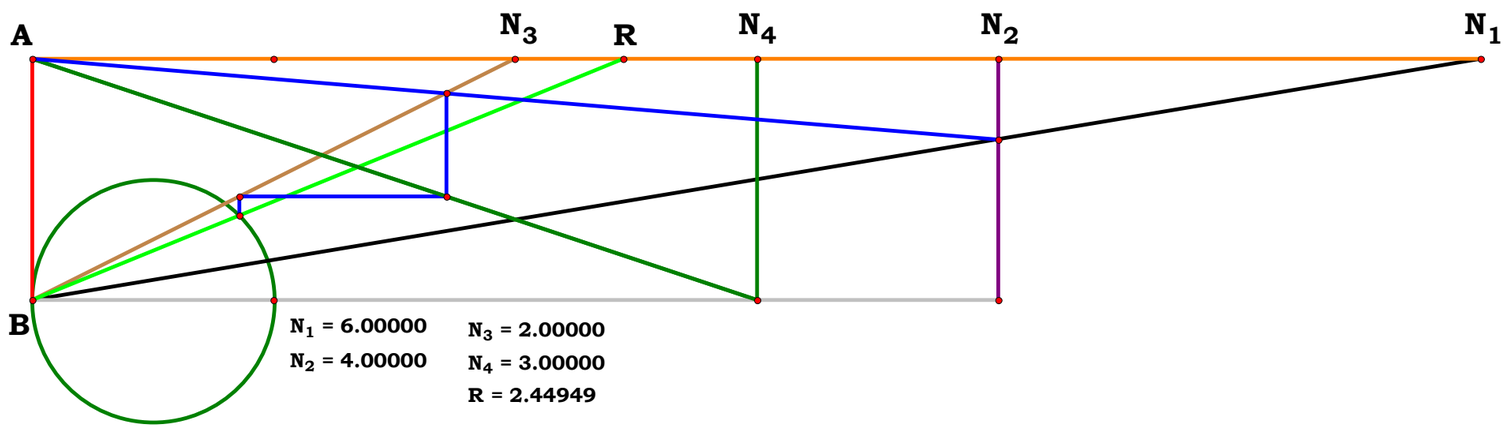
$MO := \frac{N_2}{N_1}$ $BP := \frac{N_2 \cdot AB}{AB - MO}$ $BJ := \frac{N_3 \cdot BP}{BP + N_3}$

$JK := N_4 - BJ$ $HJ := \frac{AB \cdot JK}{N_4}$ $BF := N_3 \cdot HJ$

$DF := \sqrt{BF \cdot (AB - BF)}$ $R := \frac{BF \cdot AB}{DF}$

$R = 0.665236$

$Boolean := \frac{DF^2 + \sqrt{DF^4}}{2\sqrt{DF^4}}$



$N_1 = 6.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 2.44949$

Definitions.

$$\frac{(N_3 \cdot N_4 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3) \cdot (N_4 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3) - (N_1 \cdot N_2 \cdot N_3)))}{(N_4 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3) \cdot \sqrt{(N_1 \cdot N_2 \cdot N_3^2 \cdot N_4 \cdot (2 \cdot N_3 - 1)) \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3) - (N_3 \cdot N_4^2 \cdot (N_3 - 1)) \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)^2 - (N_1^2 \cdot N_2^2 \cdot N_3^4)})} - R = 0.00000$$

Boolean $= 1$

$$R - \frac{N_3 \cdot \left[N_4 \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)\right] \cdot \left[N_4 \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right) - N_1 \cdot N_2 \cdot N_3\right]}{N_4 \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right) \cdot \sqrt{N_4 \cdot N_1 \cdot N_2 \cdot N_3^2 \cdot \left(2 \cdot N_3 - 1\right) \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right) - N_3 \cdot N_4^2 \cdot \left(N_3 - 1\right) \cdot \left(N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)^2 - N_1^2 \cdot N_2^2 \cdot N_3^4}} = 0$$

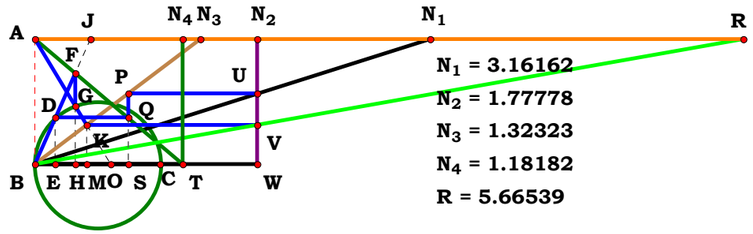
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (B - A + C - D)}{\sqrt{N_u \cdot (B - A + C - D) \cdot \left[N_u \cdot (A - B - C + D) + C \cdot (B - A + C)\right]}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot (W \cdot X \cdot Z \cdot o - W \cdot X \cdot Y \cdot p + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m)}{\sqrt{Y \cdot (W \cdot X \cdot Z \cdot o - W \cdot X \cdot Y \cdot p + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m) \cdot \left(W \cdot X \cdot Z \cdot o^2 + W \cdot X \cdot Y^2 \cdot p - W \cdot Y^2 \cdot Z \cdot n + X \cdot Y^2 \cdot Z \cdot m - W \cdot X \cdot Y \cdot Z \cdot o + W \cdot Y \cdot Z \cdot n \cdot o - X \cdot Y \cdot Z \cdot m \cdot o\right)}} = 0$$

3OBT8R4



$N_1 = 3.16162$
$N_2 = 1.77778$
$N_3 = 1.32323$
$N_4 = 1.18182$
$R = 5.66539$

Unit. $AB := 1$ Given. $N_1 := 3.16162$ $N_2 := 1.77778$ $N_3 := 1.32323$ $N_4 := 1.18182$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$BS := N_3 \cdot \frac{N_2}{N_1}$ $DE := \frac{AB \cdot (N_4 - BS)}{N_4}$ $BE := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2}$ $AJ := \frac{BE \cdot AB}{DE}$ $BH := \frac{AJ \cdot N_4}{AJ + N_4}$

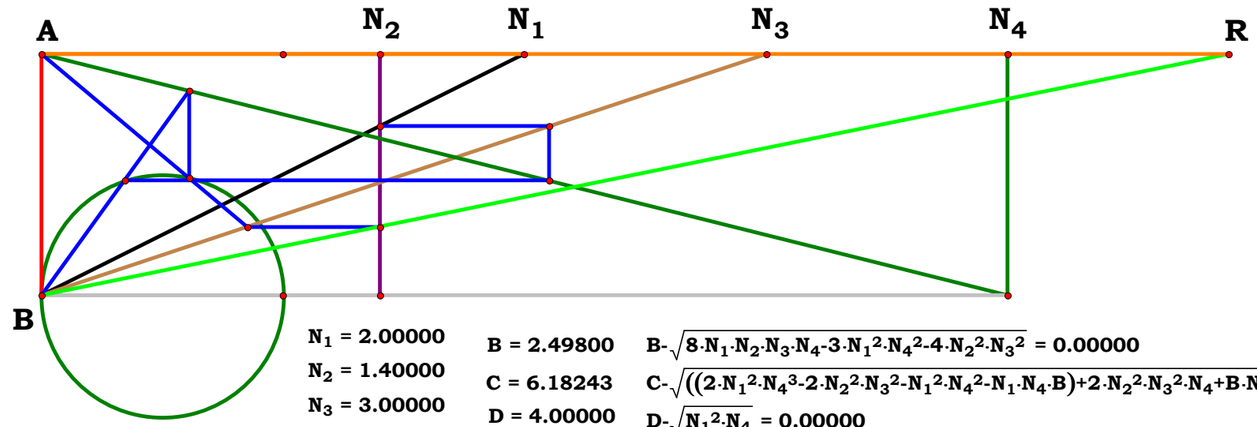
$GH := \sqrt{BH \cdot (AB - BH)}$

$BO := \frac{BH \cdot AB}{AB - GH}$ $BM := \frac{N_3 \cdot BO}{N_3 + BO}$

$VW := \frac{AB \cdot BM}{N_3}$ $R := \frac{N_2 \cdot AB}{VW}$

$R = 5.665355$

$Boolean := \frac{GH^2 + \sqrt{GH^4}}{2\sqrt{GH^4}}$



$N_1 = 2.00000$
$N_2 = 1.40000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 4.91440$

$B = 2.49800$
$C = 6.18243$
$D = 4.00000$

$B - \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2} = 0.00000$

$C - \sqrt{((2 \cdot N_1^2 \cdot N_4^3 - 2 \cdot N_2^2 \cdot N_3^2 - N_1^2 \cdot N_4^2 - N_1 \cdot N_4 \cdot B) + 2 \cdot N_2^2 \cdot N_3^2 \cdot N_4 + B \cdot N_2 \cdot N_3 \cdot N_4 + 4 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4) - 5 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4^2} = 0.00000$

$D - \sqrt{N_1^2 \cdot N_4} = 0.00000$

$\frac{2 \cdot N_2 \cdot ((B \cdot D \cdot (N_3 + N_4) - D \cdot N_1 \cdot N_4 \cdot (N_3 + N_4) - 2 \cdot D \cdot N_3 \cdot N_4 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3)) + \sqrt{2} \cdot C \cdot N_1 \cdot N_3 \cdot N_4)}{2 \cdot (B - N_1 \cdot N_4) \cdot D \cdot N_4} - R = 0.00000$

Definitions.

Boolean = 1

$$R - \frac{\sqrt{N_1^2 \cdot N_4} \cdot N_2 \cdot \left[2 \cdot N_2 \cdot N_3^2 \cdot N_4 - 2 \cdot N_1 \cdot N_3 \cdot N_4^2 - N_1 \cdot N_3 \cdot N_4 + \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)} \cdot (N_3 + N_4) - N_1 \cdot N_4^2\right] \ \ldots}{\left[\sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)} - N_1 \cdot N_4\right] \cdot \sqrt{N_1^2 \cdot N_4} \cdot N_4} = 0$$

$$\ldots \ + \sqrt{2} \cdot \sqrt{N_1^2 \cdot N_4^2 \cdot (2 \cdot N_4 - 1) - N_1 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (5 \cdot N_4 - 4) + 2 \cdot N_2^2 \cdot N_3^2 \cdot (N_4 - 1) - \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)} \cdot N_4 \cdot (N_1 - N_2 \cdot N_3)} \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{2} \cdot \sqrt{D \cdot N_u^4 \cdot (A \cdot N_u - B \cdot C) \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} + C^2 \cdot B^2 \cdot N_u^4 \cdot (2 \cdot N_u - D) + C \cdot A \cdot B \cdot D \cdot N_u^4 \cdot (4 \cdot D - 5 \cdot N_u) + 2 \cdot A^2 \cdot D^2 \cdot N_u^4 \cdot (N_u - D)} \ \ldots}{B \cdot C \cdot \sqrt{N_u} \cdot \left[\sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C\right]} = 0$$

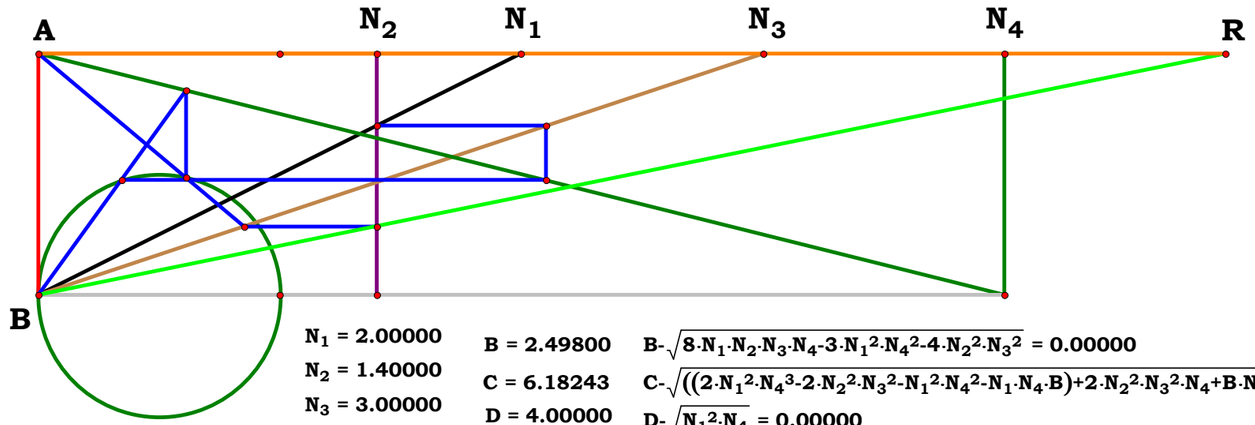
$$\ldots \ + \left(\sqrt{N_u}\right)^3 \cdot \left[\sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} \cdot (C + D) - B \cdot C^2 - B \cdot C \cdot D + 2 \cdot A \cdot D \cdot N_u - 2 \cdot B \cdot C \cdot N_u\right]$$

$W := 20 \quad X := 19 \quad Y := 18 \quad Z := 17 \quad m := \frac{W}{N_1} \quad n := \frac{X}{N_2} \quad o := \frac{Y}{N_3} \quad p := \frac{Z}{N_4}$

$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$

$R = 5.665355$



$N_1 = 2.00000$
$N_2 = 1.40000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$R = 4.91440$

$B = 2.49800$
$C = 6.18243$
$D = 4.00000$

$B - \sqrt{8 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4 - 3 \cdot N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3^2} = 0.00000$

$C - \sqrt{\left((2 \cdot N_1^2 \cdot N_4^3 - 2 \cdot N_2^2 \cdot N_3^2 - N_1^2 \cdot N_4^2 - N_1 \cdot N_4 \cdot B) + 2 \cdot N_2^2 \cdot N_3^2 \cdot N_4 + B \cdot N_2 \cdot N_3 \cdot N_4 + 4 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4\right) - 5 \cdot N_1 \cdot N_2 \cdot N_3 \cdot N_4^2} = 0.00000$

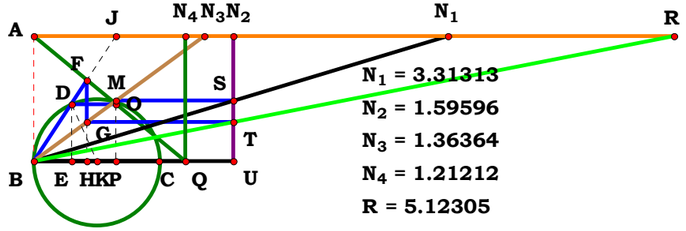
$D - \sqrt{N_1^2 \cdot N_4} = 0.00000$

$$\frac{2 \cdot N_2 \cdot \left((B \cdot D \cdot (N_3 + N_4) - D \cdot N_1 \cdot N_4 \cdot (N_3 + N_4) - 2 \cdot D \cdot N_3 \cdot N_4 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3)) + \sqrt{2} \cdot C \cdot N_1 \cdot N_3 \cdot N_4\right)}{2 \cdot (B - N_1 \cdot N_4) \cdot D \cdot N_4} - R = 0.00000$$

$$R - \frac{X \cdot \left[W \cdot Z^2 \cdot n \cdot o^2 - \sqrt{8 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot n \cdot o \cdot p - 3 \cdot W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot p^2} \cdot (Y \cdot p + Z \cdot o) \ \ldots \right.}{Z \cdot n \cdot o \cdot \left[W \cdot Z \cdot n \cdot o - \sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)} \right]}$$

$$\left. + \ -\sqrt{2} \cdot Y \cdot \sqrt{Z} \cdot \sqrt{\begin{array}{l} 2 \cdot W^2 \cdot Z^3 \cdot n^2 \cdot o^2 - 2 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot p^3 + 2 \cdot X^2 \cdot Y^2 \cdot Z \cdot m^2 \cdot p^2 - W^2 \cdot Z^2 \cdot n^2 \cdot o^2 \cdot p \ \ldots \\ + \ \sqrt{8 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot n \cdot o \cdot p - 3 \cdot W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot p^2} \cdot Z \cdot p \cdot (X \cdot Y \cdot m - W \cdot n \cdot o) \ \ldots \\ + \ 4 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot n \cdot o \cdot p^2 - 5 \cdot W \cdot X \cdot Y \cdot Z^2 \cdot m \cdot n \cdot o \cdot p \end{array}} + Y \cdot Z \cdot (2 \cdot W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p + W \cdot n \cdot o \cdot p) \right] = 0$$

3OBT8R5



Unit. $AB := 1$ Given. $N_1 := 3.31313$ $N_2 := 1.59596$ $N_3 := 1.36364$

$N_4 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$SU := \frac{N_2}{N_1}$ $bp := N_3 \cdot SU$

$OP := \frac{N_4 - bp}{N_4}$ $EK := \sqrt{\left(\frac{AB}{2}\right)^2 - OP^2}$ $BE := \frac{AB}{2} - EK$ $AJ := \frac{BE}{OP}$

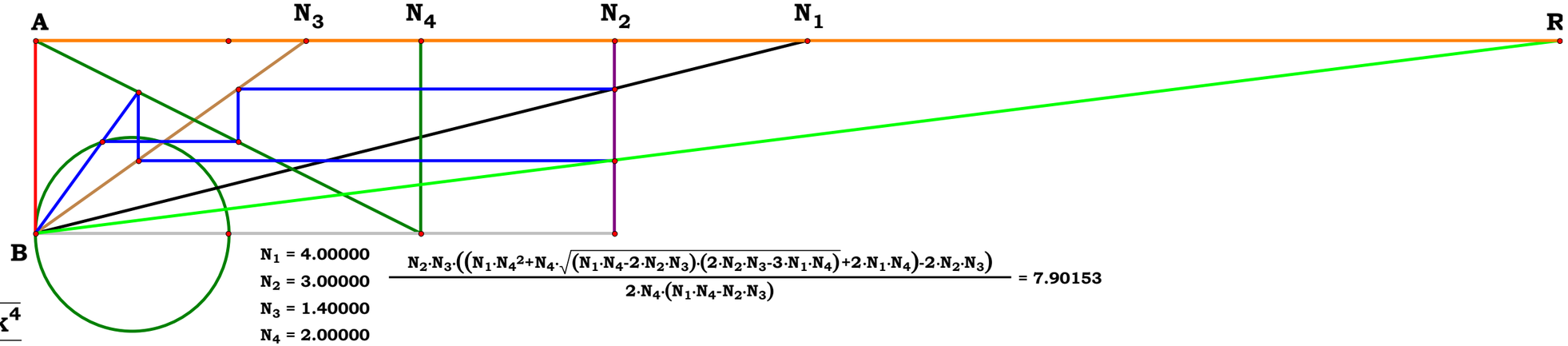
$BH := \frac{AJ \cdot N_4}{AJ + N_4}$

$GH := \frac{BH}{N_3}$

$R := \frac{N_2}{GH}$

$R = 5.123112$

$Boolean := \frac{EK^2 + \sqrt{EK^4}}{2\sqrt{EK^4}}$



$\frac{N_2 \cdot N_3 \cdot \left(\left(N_1 \cdot N_4^2 + N_4 \cdot \sqrt{\left(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3\right) \cdot \left(2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4\right)} + 2 \cdot N_1 \cdot N_4\right) - 2 \cdot N_2 \cdot N_3\right)}{2 \cdot N_4 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} = 7.90153$

Definitions.

$Boolean = 1$

$R - \frac{N_2 \cdot N_3 \cdot \left[N_1 \cdot N_4^2 + N_4 \cdot \sqrt{\left(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3\right) \cdot \left(2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4\right)} + 2 \cdot N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3\right]}{2 \cdot N_4 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot \left[2 \cdot A \cdot D^2 - N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C \cdot \left(2 \cdot D + N_u\right)\right]}{2 \cdot B \cdot C \cdot (A \cdot D - B \cdot C)} = 0$

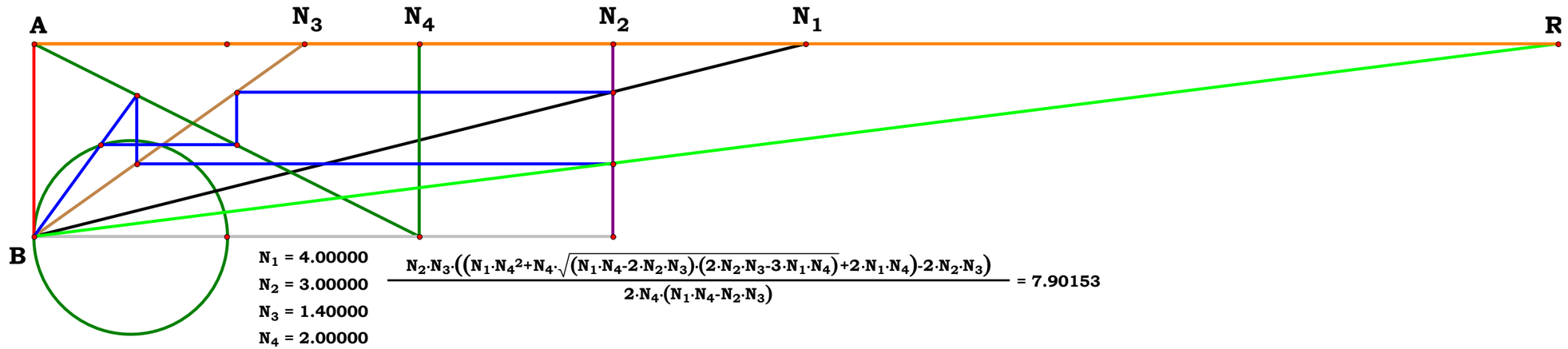
$W := 20 \quad X := 19 \quad Y := 18 \quad Z := 17 \quad m := \frac{W}{N_1} \quad n := \frac{X}{N_2} \quad o := \frac{Y}{N_3} \quad p := \frac{Z}{N_4}$

$N_1 - \frac{W}{m} = 0$

$N_2 - \frac{X}{n} = 0$

$N_3 - \frac{Y}{o} = 0$

$N_4 - \frac{Z}{p} = 0$



$N_1 = 4.00000$

$N_2 = 3.00000$

$N_3 = 1.40000$

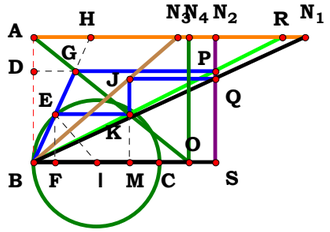
$N_4 = 2.00000$

$R = 7.90153$

$$\frac{N_2 \cdot N_3 \cdot \left(\left(N_1 \cdot N_4^2 + N_4 \cdot \sqrt{\left(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3 \right) \cdot \left(2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4 \right)} + 2 \cdot N_1 \cdot N_4 \right) - 2 \cdot N_2 \cdot N_3 \right)}{2 \cdot N_4 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3 \right)} = 7.90153$$

$$R - \frac{X \cdot Y \cdot \left[Z \cdot \sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)} + W \cdot Z^2 \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p^2 + 2 \cdot W \cdot Z \cdot n \cdot o \cdot p \right]}{2 \cdot Z \cdot n \cdot o \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p)} = 0$$

3OBT8R6



$N_1 = 2.17172$
$N_2 = 1.45455$
$N_3 = 1.15152$
$N_4 = 1.24242$
$R = 1.99216$

Unit. $AB := 1$ **Given.** $N_1 := 2.17172$ $N_2 := 1.45455$ $N_3 := 1.15152$ $N_4 := 1.24242$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

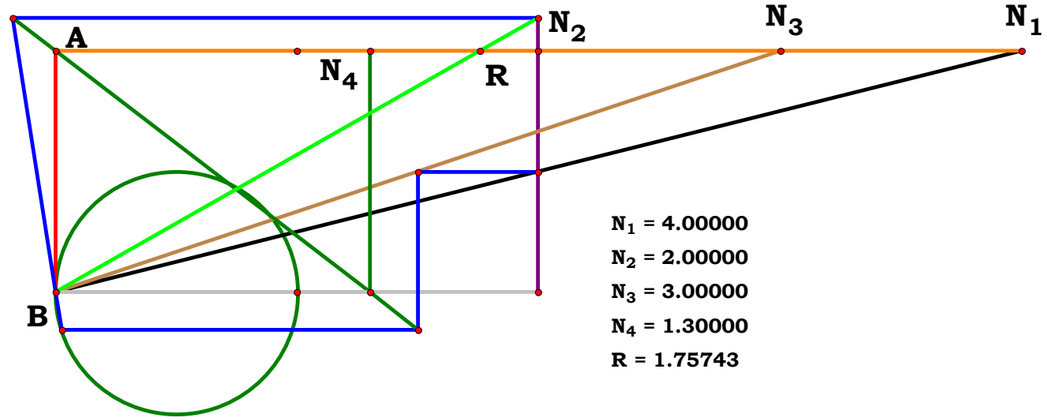
Descriptions.

$QS := \frac{N_2}{N_1}$ $BM := N_3 \cdot QS$ $KM := \frac{N_4 - BM}{N_4}$

$BF := \frac{1}{2} - \sqrt{\left(\frac{1}{2}\right)^2 - KM^2}$ $AH := \frac{BF}{KM}$ $BD := \frac{N_4}{N_4 + AH}$

$R := \frac{N_2}{BD}$ $R = 1.992156$

$Boolean := \frac{BF^2 + \sqrt{BF^4}}{2\sqrt{BF^4}}$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 1.30000$
$R = 1.75743$

Definitions.

$$\frac{N_1 \cdot N_2 \cdot N_4^2 \cdot (N_1 + 2 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3)) - 2 \cdot N_1 \cdot N_4 \cdot \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}}{2 \cdot N_1 \cdot N_4^2 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3)} - R = 0.00000$$

Boolean $= 1$

$$R - \frac{N_1 \cdot N_2 \cdot N_4^2 \cdot \left[N_1 + 2 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)\right] - N_2 \cdot \left(N_1 \cdot N_4\right) \cdot \sqrt{\left(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3\right) \cdot \left(2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4\right)}}{2 \cdot N_1 \cdot N_4^2 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} = 0$$

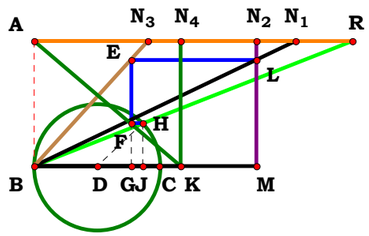
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C \cdot D + 2 \cdot N_u \cdot (A \cdot D - B \cdot C)}{2 \cdot B \cdot (A \cdot D - B \cdot C)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot \left[2 \cdot W \cdot Z^2 \cdot n \cdot o - p \cdot \sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)} - 2 \cdot X \cdot Y \cdot Z \cdot m \cdot p + W \cdot Z \cdot n \cdot o \cdot p\right]}{2 \cdot Z \cdot n \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p)} = 0$$

3OBT8R7



$N_1 = 2.09091$
$N_2 = 1.77778$
$N_3 = 0.90909$
$N_4 = 1.17172$
$R = 2.54547$

Unit. $AB := 1$ Given. $N_1 := 2.09091$ $N_2 := 1.77778$ $N_3 := .90909$ $N_4 := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$LM := \frac{N_2}{N_1}$ $BG := N_3 \cdot LM$

$FG := \frac{N_4 - BG}{N_4}$ $BJ := \frac{1}{2} + \sqrt{\left(\frac{1}{2}\right)^2 - FG^2}$

$R := \frac{BJ}{FG}$ $R = 2.545454$

$Boolean := \frac{BJ^2 + \sqrt{BJ^4}}{2\sqrt{BJ^4}}$

Definitions.

Boolean $= 1$

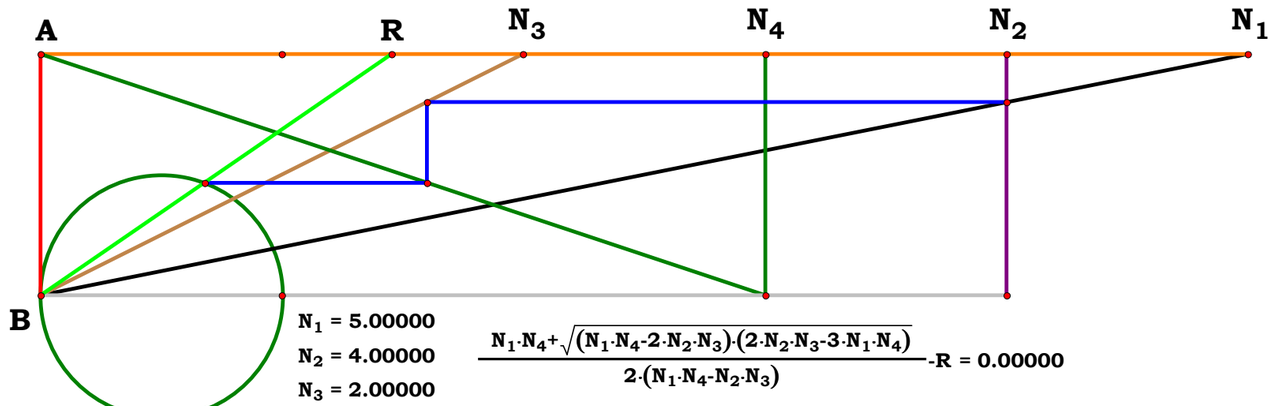
$$R - \frac{\sqrt{\left(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3\right) \cdot \left(2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4\right)} + N_1 \cdot N_4}{2 \cdot \left(N_1 \cdot N_4 - N_2 \cdot N_3\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} + B \cdot C}{2 \cdot (B \cdot C - A \cdot D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{(W \cdot Z \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m \cdot p) \cdot (2 \cdot X \cdot Y \cdot m \cdot p - 3 \cdot W \cdot Z \cdot n \cdot o)} + W \cdot Z \cdot n \cdot o}{2 \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p)} = 0$$

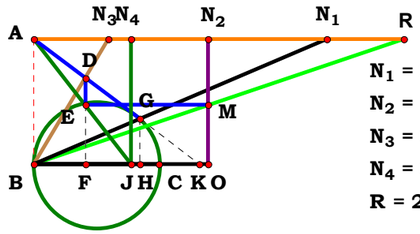


$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$

$\frac{N_1 \cdot N_4 + \sqrt{(N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_3) \cdot (2 \cdot N_2 \cdot N_3 - 3 \cdot N_1 \cdot N_4)}}{2 \cdot (N_1 \cdot N_4 - N_2 \cdot N_3)} - R = 0.00000$

$R = 1.45608$

3OBT8R8



$N_1 = 2.34343$
$N_2 = 1.39394$
$N_3 = 0.59596$
$N_4 = 0.77778$
$R = 2.95561$

Unit. $AB := 1$ **Given.** $N_1 := 2.34343$ $N_2 := 1.39394$ $N_3 := .59596$ $N_4 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

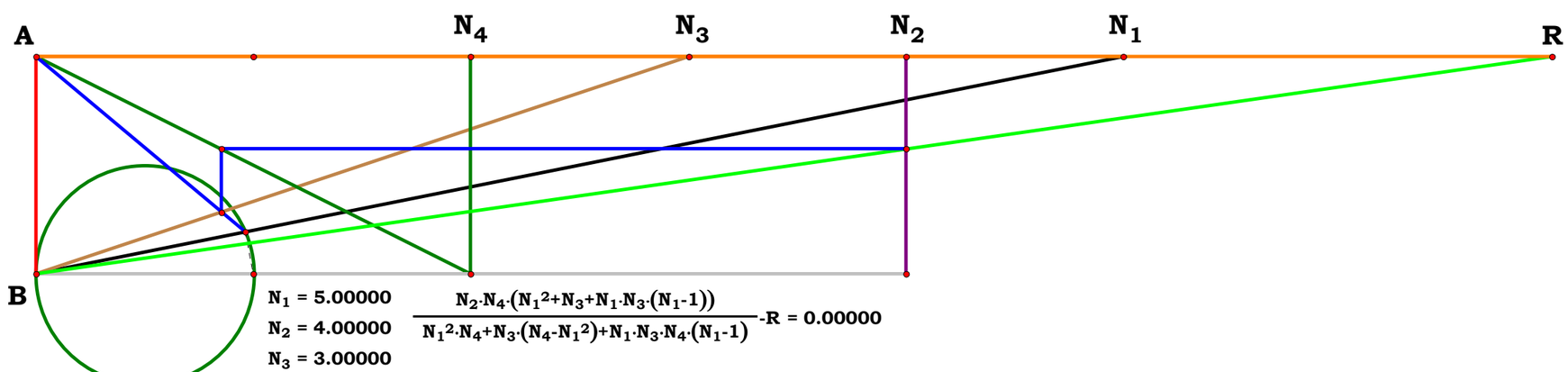
$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1}{BN_1}$

$GH := \frac{AB \cdot BG}{BN_1}$ $BH := N_1 \cdot GH$

$BK := \frac{BH}{1 - GH}$ $BF := \frac{N_3 \cdot BK}{N_3 + BK}$

$EF := \frac{N_4 - BF}{N_4}$ $R := \frac{N_2}{EF}$

$R = 2.955605$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$

$\frac{N_2 \cdot N_4 \cdot (N_1^2 + N_3 + N_1 \cdot N_3 \cdot (N_1 - 1))}{N_1^2 \cdot N_4 + N_3 \cdot (N_4 - N_1^2) + N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - 1)} - R = 0.00000$

$R = 6.97030$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot \left[N_1^2 + N_3 + N_1 \cdot N_3 \cdot (N_1 - 1)\right]}{N_1^2 \cdot N_4 + N_3 \cdot \left(N_4 - N_1^2\right) + N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - 1)} = 0$$

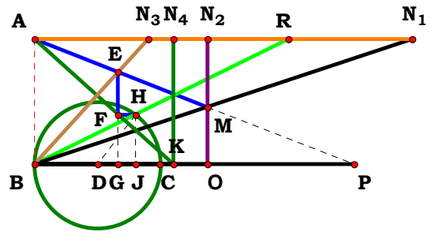
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)}{B \cdot \left(A^2 + N_u^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot X \cdot Y \cdot Z + X \cdot Y \cdot Z \cdot m^2 + W^2 \cdot X \cdot Z \cdot o - W \cdot X \cdot Y \cdot Z \cdot m}{n \cdot \left(W^2 \cdot Y \cdot Z + Y \cdot Z \cdot m^2 - W^2 \cdot Y \cdot p + W^2 \cdot Z \cdot o - W \cdot Y \cdot Z \cdot m\right)} = 0$$

3OBT8R9



$N_1 = 3.02020$
$N_2 = 1.38384$
$N_3 = 0.90909$
$N_4 = 1.11111$
$R = 2.02852$

Unit. $AB := 1$ **Given.** $N_1 := 3.02020$ $N_2 := 1.38384$ $N_3 := .90909$ $N_4 := 1.11111$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$MO := \frac{N_2}{N_1}$ $BP := \frac{N_2}{1 - MO}$

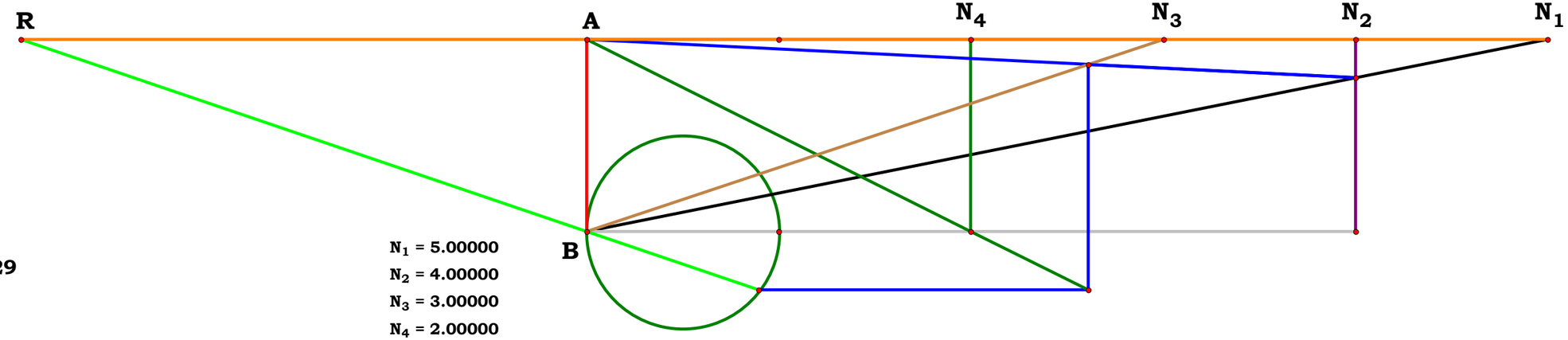
$BG := \frac{N_3 \cdot BP}{N_3 + BP}$

$FG := \frac{N_4 - BG}{N_4}$

$BJ := \frac{1}{2} + \sqrt{\left(\frac{1}{2}\right)^2 - FG^2}$

$R := \frac{BJ}{FG}$ $R = 2.028529$

$Boolean := \frac{BJ^2 + \sqrt{BJ^4}}{2\sqrt{BJ^4}}$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = -2.94631$

$$\frac{(N_1 \cdot N_4 \cdot (N_2 + N_3) - N_2 \cdot N_3 \cdot N_4) + \sqrt{((N_3 \cdot N_4 \cdot (N_1 - N_2) - N_1 \cdot N_2 \cdot (2 \cdot N_3 - N_4)) \cdot (2 \cdot N_1 \cdot N_2 \cdot N_3 - 3 \cdot N_4 \cdot ((N_1 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)))}}{(2 \cdot (N_3 \cdot N_4 \cdot (N_1 - N_2) - N_1 \cdot N_2 \cdot (N_3 - N_4)))} - R = 0.00000$$

Definitions.

$Boolean = 1$

$$R - \frac{\sqrt{\left[N_3 \cdot N_4 \cdot (N_1 - N_2) - N_1 \cdot N_2 \cdot (2 \cdot N_3 - N_4)\right] \cdot \left[2 \cdot N_1 \cdot N_2 \cdot N_3 - 3 \cdot N_4 \cdot (N_1 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)\right]} + N_1 \cdot N_4 \cdot (N_2 + N_3) - N_2 \cdot N_3 \cdot N_4}{2 \cdot \left[N_3 \cdot N_4 \cdot (N_1 - N_2) - N_1 \cdot N_2 \cdot (N_3 - N_4)\right]} = 0$$

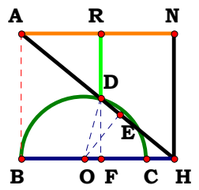
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A - B - C - \sqrt{(B - A + C - 2 \cdot D) \cdot (3 \cdot A - 3 \cdot B - 3 \cdot C + 2 \cdot D)}}{2 \cdot (A - B - C + D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{(W \cdot X \cdot Z \cdot o - 2 \cdot W \cdot X \cdot Y \cdot p + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m) \cdot (2 \cdot W \cdot X \cdot Y \cdot p - 3 \cdot W \cdot X \cdot Z \cdot o - 3 \cdot W \cdot Y \cdot Z \cdot n + 3 \cdot X \cdot Y \cdot Z \cdot m)} + W \cdot X \cdot Z \cdot o + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m}{2 \cdot (W \cdot X \cdot Z \cdot o - W \cdot X \cdot Y \cdot p + W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m)} = 0$$

3OBT9R0



N = 1.22222
R = 0.63319

Unit. $AB := 1$ Given. $N := 1.22222$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BH := N$ $BO := \frac{AB}{2}$ $DO := BO$ $AH := \sqrt{AB^2 + N^2}$

$HO := BH - BO$ $EH := \frac{BH \cdot HO}{AH}$ $EO := \frac{AB \cdot HO}{AH}$

$DE := \sqrt{DO^2 - EO^2}$ $DH := EH + DE$ $FH := \frac{BH \cdot DH}{AH}$

$R := BH - FH$ $R = 0.633191$

$$Boolean := \frac{DE^2 + \sqrt{DE^4}}{2\sqrt{DE^4}}$$

Definitions.

Boolean = 1

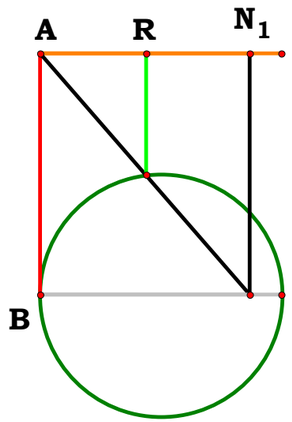
$$R - \frac{N^2 + 2N - N\left(4 \cdot N - 3 \cdot N^2\right)^{\frac{1}{2}}}{2N^2 + 2} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot \left(4 \cdot A - 3 \cdot N_u\right)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right)} = 0$$

$$N - \frac{Z}{q} = 0$$

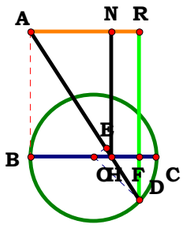
$$R - \frac{Z \cdot \left[Z + 2 \cdot q - \sqrt{Z \cdot (4 \cdot q - 3 \cdot Z)}\right]}{2 \cdot \left(Z^2 + q^2\right)} = 0$$



$N_1 = 0.86667$
$R = 0.43681$

$$\frac{\left(N_1{}^2 + 2 \cdot N_1\right) - N_1 \cdot \left(4 \cdot N_1 - 3 \cdot N_1{}^2\right)^{\frac{1}{2}}}{2 \cdot N_1{}^2 + 2} - R = 0.00000$$

3OBT9R1



Unit. $AB := 1$ Given. $N := .64646$

$N = 0.64646$
$R = 0.86640$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BH := N$ $BO := \frac{AB}{2}$

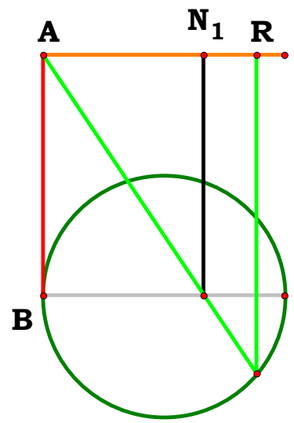
$DO := BO$ $AH := \sqrt{AB^2 + N^2}$

$HO := BH - BO$ $EH := \frac{BH \cdot HO}{AH}$

$EO := \frac{AB \cdot HO}{AH}$ $DE := \sqrt{DO^2 - EO^2}$

$DH := EH - DE$ $FH := \frac{BH \cdot DH}{AH}$

$R := BH - FH$ $R = 0.8664$



$N_1 = 0.66667$
$R = 0.88185$

$\frac{N_1^2+2\cdot N_1+N_1\cdot\sqrt{4\cdot N_1-3\cdot N_1^2}}{2\cdot N_1^2+2} - R = 0.00000$

Definitions.

$$R - \frac{N^2 + 2N + N\left(4 \cdot N - 3 \cdot N^2\right)^{\frac{1}{2}}}{2N^2 + 2} = 0$$

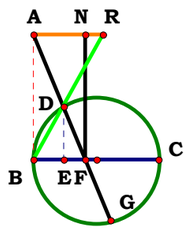
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot \left(4 \cdot A - 3 \cdot N_u\right)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right)} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot \left[Z + 2 \cdot q + \sqrt{Z \cdot (4 \cdot q - 3 \cdot Z)}\right]}{2 \cdot \left(Z^2 + q^2\right)} = 0$$

3OBT9R2



N = 0.41414
R = 0.55859

Unit. $AB := 1$ **Given.** $N := .41414$

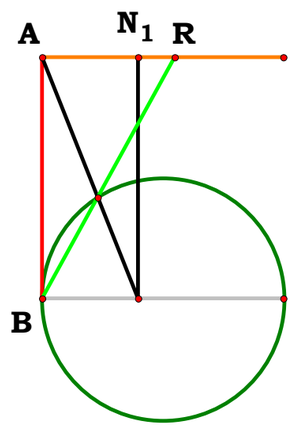
$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BE := \frac{N^2 + 2N - N\left(4 \cdot N - 3 \cdot N^2\right)^{\frac{1}{2}}}{2N^2 + 2}$$

$CE := AB - BE$ $DE := \sqrt{BE \cdot CE}$

$R := \frac{BE \cdot AB}{DE}$ $R = 0.558594$



$N_1 = 0.40000$

$R = 0.54858$

$$\frac{(N_1{}^2+2\cdot N_1)-N_1\cdot\sqrt{4\cdot N_1-3\cdot N_1{}^2}}{(2\cdot N_1{}^2-N_1)+\sqrt{4\cdot N_1-3\cdot N_1{}^2}}-R = 0.00000$$

Definitions.

$$R - \frac{N^2 + 2N - N\cdot\sqrt{4N - 3N^2}}{2N^2 - N + \sqrt{4N - 3N^2}} = 0$$

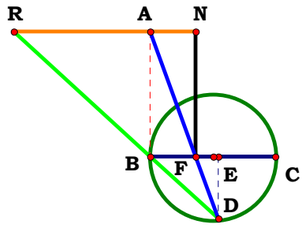
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u\cdot\left[\sqrt{N_u\cdot\left(4\cdot A - 3\cdot N_u\right)} - N_u - 2\cdot A\right]}{A\cdot N_u - 2\cdot N_u{}^2 - A\cdot\sqrt{N_u\cdot\left(4\cdot A - 3\cdot N_u\right)}} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z\cdot\left[Z + 2\cdot q - \sqrt{Z\cdot(4\cdot q - 3\cdot Z)}\right]}{2\cdot Z^2 - Z\cdot q + q\cdot\sqrt{Z\cdot(4\cdot q - 3\cdot Z)}} = 0$$

3OBT9R3



N = 0.36364
R = -1.09384

Unit. $AB := 1$ Given. $N := .36364$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BE := \frac{N^2 + 2N + N\left(4 \cdot N - 3 \cdot N^2\right)^{\frac{1}{2}}}{2N^2 + 2}$$

$CE := AB - BE$ $DE := \frac{N - BE}{\sqrt{(N - BE)^2}} \cdot \sqrt{BE \cdot CE}$

$R := \frac{BE \cdot AB}{DE}$ $R = -1.093848$

Definitions.

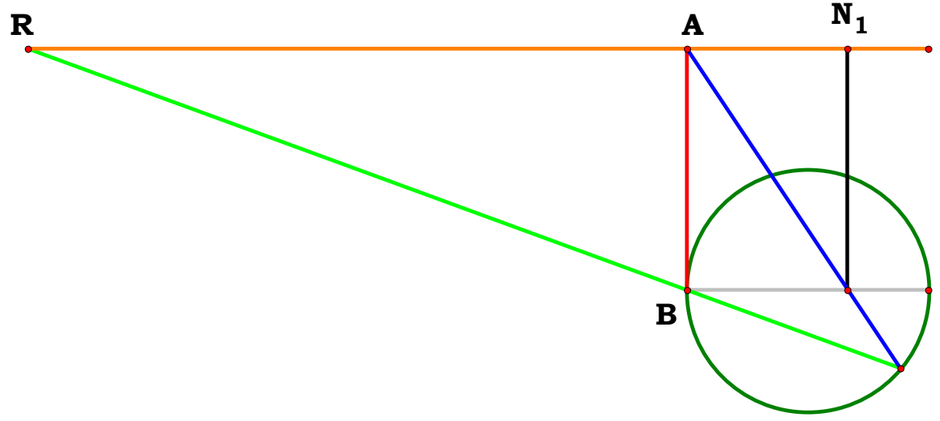
$$R - \frac{2 \cdot N + N^2 + N \cdot \sqrt{4 \cdot N - 3 \cdot N^2}}{2 \cdot N^2 - N - \sqrt{4 \cdot N - 3 \cdot N^2}} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot \left(4 \cdot A - 3 \cdot N_u\right)}\right]}{2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot \left(4 \cdot A - 3 \cdot N_u\right)} - A \cdot N_u} = 0$$

$$N - \frac{Z}{q} = 0$$

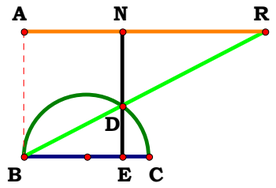
$$R - \frac{Z \cdot \left[Z + 2 \cdot q + \sqrt{Z \cdot (4 \cdot q - 3 \cdot Z)}\right]}{2 \cdot Z^2 - Z \cdot q - q \cdot \sqrt{Z \cdot (4 \cdot q - 3 \cdot Z)}} = 0$$



$N_1 = 0.66667$
R = -2.73205

$$\frac{2 \cdot N_1 + {N_1}^2 + N_1 \cdot \sqrt{4 \cdot N_1 - 3 \cdot {N_1}^2}}{2 \cdot {N_1}^2 - N_1 - \sqrt{4 \cdot N_1 - 3 \cdot {N_1}^2}} - R = 0.00000$$

3OBT9R4



N = 0.78788
R = 1.92725

Unit. $AB := 1$ Given. $N := .78788$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BE := N$ $CE := AB - BE$

$DE := \sqrt{BE \cdot CE}$ $R := \frac{BE}{DE}$

$R = 1.927255$

Definitions.

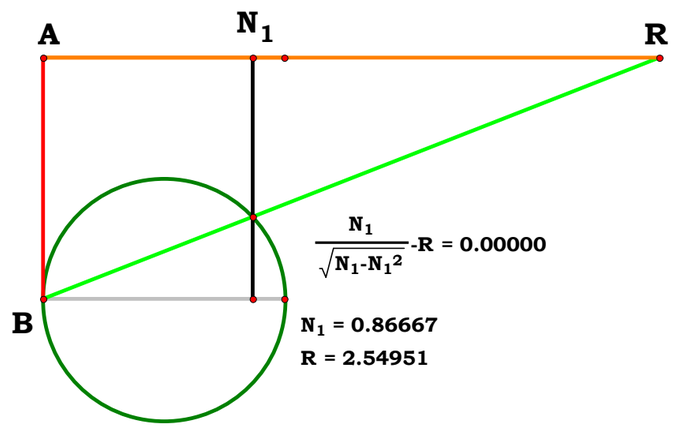
$$R - \frac{N}{\left(N - N^2\right)^{\frac{1}{2}}} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u}{\sqrt{N_u \cdot \left(A - N_u\right)}} = 0$$

$$N - \frac{Z}{q} = 0$$

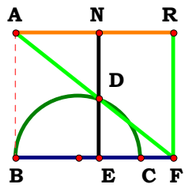
$$R - \frac{Z}{\sqrt{Z \cdot (q - Z)}} = 0$$



$\frac{N_1}{\sqrt{N_1 - N_1^2}} - R = 0.00000$

$N_1 = 0.86667$
$R = 2.54951$

3OBT9R5



N = 0.66667

R = 1.26120

Unit. $AB := 1$ **Given.** $N := .66667$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BE := N$ $CE := AB - BE$

$DE := \sqrt{BE \cdot CE}$

$DN := AB - DE$ $R := \frac{N}{DN}$

$R = 1.261207$

Definitions.

$$R - \frac{N}{1 - \left(N - N^2\right)^{\frac{1}{2}}} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{N_u}{A - \sqrt{N_u \cdot \left(A - N_u\right)}} = 0$$

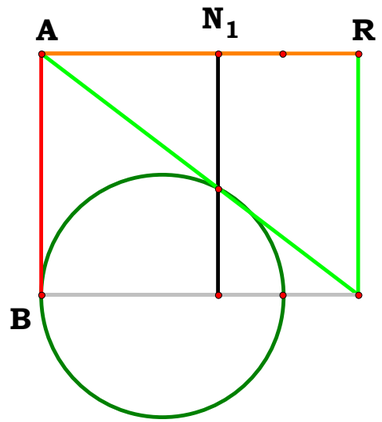
$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z}{q - \sqrt{Z \cdot (q - Z)}} = 0$$

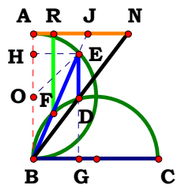
$N_1 = 0.73333$

$R = 1.31473$

$\frac{N_1}{1-\sqrt{N_1-N_1^2}} - R = 0.00000$



3OBT10AR0



N = 0.75758
R = 0.15790

Unit. $AB := 1$ Given. $N := .75758$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

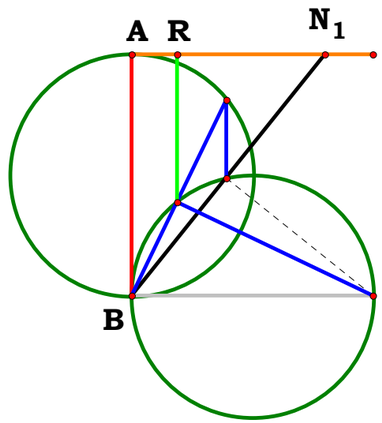
$$BG := \frac{N^2}{N^2+1} \qquad HO := \sqrt{\left(\frac{AB}{2}\right)^2 - BG^2}$$

$$BH := \frac{AB}{2} + HO \qquad AJ := \frac{BG \cdot AB}{BH}$$

$$R := \frac{AJ^2}{AJ^2+1} \qquad R = 0.157899$$

Definitions.

$$R - \frac{N^2 - \sqrt{2\cdot N^2 - 3\cdot N^4 + 1} + 1}{2N^2+2} = 0$$



$N_1 = 0.80000$
$R = 0.18741$
$\frac{\left(N_1{}^2 - \sqrt{\left(2\cdot N_1{}^2 - 3\cdot N_1{}^4\right)+1}\right)+1}{2\cdot N_1{}^2+2}$ -R = 0.00000

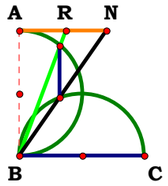
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A^2 - \sqrt{\left(A+N_u\right)\cdot\left(A^2+3\cdot N_u{}^2\right)\cdot\left(A-N_u\right)} + N_u{}^2}{2\cdot\left(A^2+N_u{}^2\right)} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z^2+q^2-\sqrt{2\cdot Z^2\cdot q^2 - 3\cdot Z^4 + q^4}}{2\cdot\left(Z^2+q^2\right)} = 0$$

3OBT10AR1



N = 0.69697
R = 0.37225

Unit. $AB := 1$ Given. $N := .69697$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

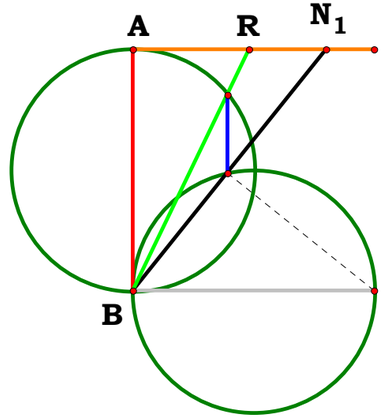
$$R := \frac{2N^2}{N^2 + \left(2 \cdot N^2 - 3 \cdot N^4 + 1\right)^{\frac{1}{2}} + 1}$$

$R = 0.372253$

Definitions.

$$R - \frac{N^2 - \sqrt{2 \cdot N^2 - 3 \cdot N^4 + 1} + 1}{2N^2} = 0$$

$$N - \frac{N_u}{A} = 0$$



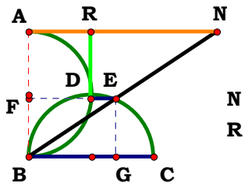
$N_1 = 0.80000$
$R = 0.48025$
$\frac{\left(N_1{}^2 - \sqrt{\left(2 \cdot N_1{}^2 - 3 \cdot N_1{}^4\right) + 1}\right) + 1}{2 \cdot N_1{}^2} - R = 0.00000$

$$R - \frac{A^2 - \sqrt{\left(A + N_u\right) \cdot \left(A^2 + 3 \cdot N_u{}^2\right) \cdot \left(A - N_u\right)} + N_u{}^2}{2 \cdot N_u{}^2} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z^2 + q^2 - \sqrt{2 \cdot Z^2 \cdot q^2 - 3 \cdot Z^4 + q^4}}{2 \cdot Z^2} = 0$$

3OBT10AR2



N = 1.50505
R = 0.49847

Unit. $AB := 1$ Given. $N := 1.50505$

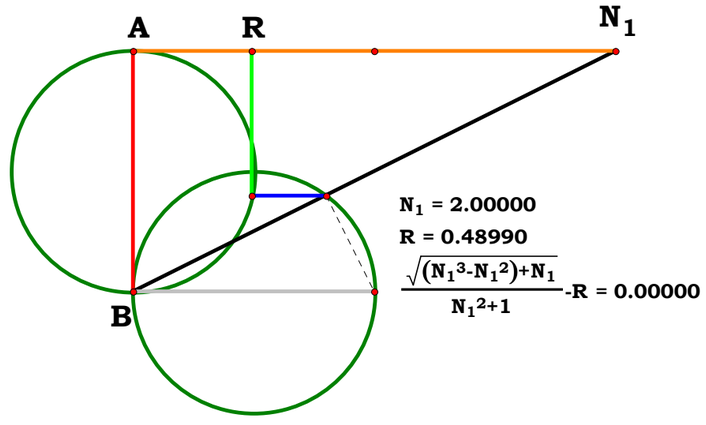
$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$EG := \frac{N}{N^2 + 1}$ $BF := EG$

$AF := AB - BF$ $DF := \sqrt{BF \cdot AF}$

$R := DF$ $R = 0.498472$



$N_1 = 2.00000$
$R = 0.48990$
$\frac{\sqrt{(N_1{}^3 - N_1{}^2) + N_1}}{N_1{}^2 + 1} - R = 0.00000$

Definitions.

$$R - \frac{\left(N^3 - N^2 + N\right)^{\frac{1}{2}}}{N^2 + 1} = 0$$

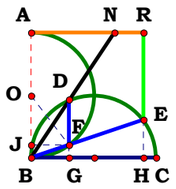
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{A \cdot N_u \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)}}{A^2 + N_u{}^2} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{q} \cdot \sqrt{Z \cdot \left(Z^2 - Z \cdot q + q^2\right)}}{Z^2 + q^2} = 0$$

3OBT10AR3



N = 0.66667
R = 0.89411

Unit. $AB := 1$ Given. $N := .66667$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BG := \frac{N^2}{N^2+1} \qquad FJ := BG$$

$$OJ := \sqrt{\left(\frac{AB}{2}\right)^2 - FJ^2} \qquad AJ := \frac{AB}{2} + OJ$$

$$BH := AJ \qquad R := BH$$

$$R = 0.894112$$

Definitions.

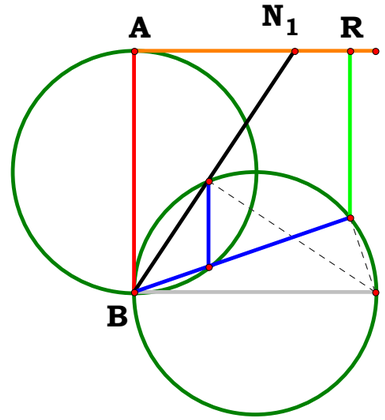
$$R - \frac{N^2 + \sqrt{2\cdot N^2 - 3\cdot N^4 + 1} + 1}{2\cdot\left(N^2+1\right)} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A^2 + \sqrt{\left(A+N_u\right)\cdot\left(A^2+3\cdot {N_u}^2\right)\cdot\left(A-N_u\right)} + {N_u}^2}{2\cdot\left(A^2+{N_u}^2\right)} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z^2 + q^2 + \sqrt{2\cdot Z^2\cdot q^2 - 3\cdot Z^4 + q^4}}{2\cdot\left(Z^2+q^2\right)} = 0$$



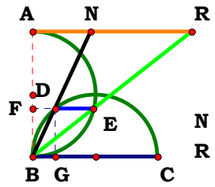
$N_1 = 0.66667$

$R = 0.89411$

$$\frac{N_1{}^2 + \sqrt{\left(2\cdot N_1{}^2 - 3\cdot N_1{}^4\right)+1}+1}{2\cdot\left(N_1{}^2+1\right)} - R = 0.00000$$

$$\frac{2\cdot N_1{}^4}{\left(N_1{}^2+1\right)\cdot\left(\left(N_1{}^2 - \sqrt{\left(2\cdot N_1{}^2 - 3\cdot N_1{}^4\right)+1}\right)+1\right)} - R = 0.00000$$

3OBT10AR4



N = 0.46465
R = 1.27154

Unit. $AB := 1$ Given. $N := .46465$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BN := \sqrt{AB^2 + N^2}$ $BD := \frac{N}{BN}$

$DG := \frac{AB \cdot BD}{BN}$ $FE := \sqrt{DG \cdot (AB - DG)}$

$R := \frac{FE \cdot AB}{DG}$ $R = 1.271537$

Definitions

$$R - \frac{\sqrt{\left(N^3 - N^2 + N\right)}}{N} = 0$$

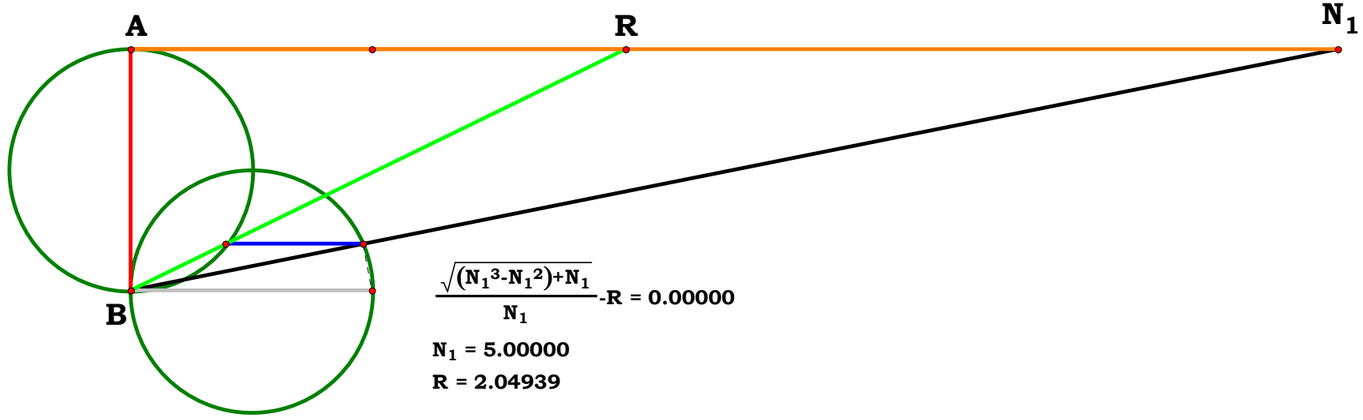
N_u

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}}{\sqrt{A} \cdot N_u} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Z \cdot \left(Z^2 - Z \cdot q + q^2\right)}}{Z \cdot \sqrt{q}} = 0$$

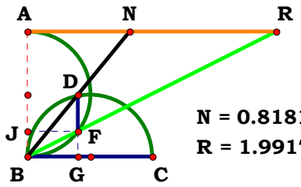


$\frac{\sqrt{(N_1{}^3 - N_1{}^2) + N_1}}{N_1}$ -R = 0.00000

$N_1 = 5.00000$

R = 2.04939

3OBT10AR5



N = 0.81818
R = 1.99176

Unit. $AB := 1$ Given. $N := .81818$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BN := \sqrt{AB^2 + N^2}$ $BD := \frac{N}{BN}$

$BG := \frac{N \cdot BD}{BN}$

$FG := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - BG^2}$ $R := \frac{BG \cdot AB}{FG}$

$R = 1.991767$

Definitions.

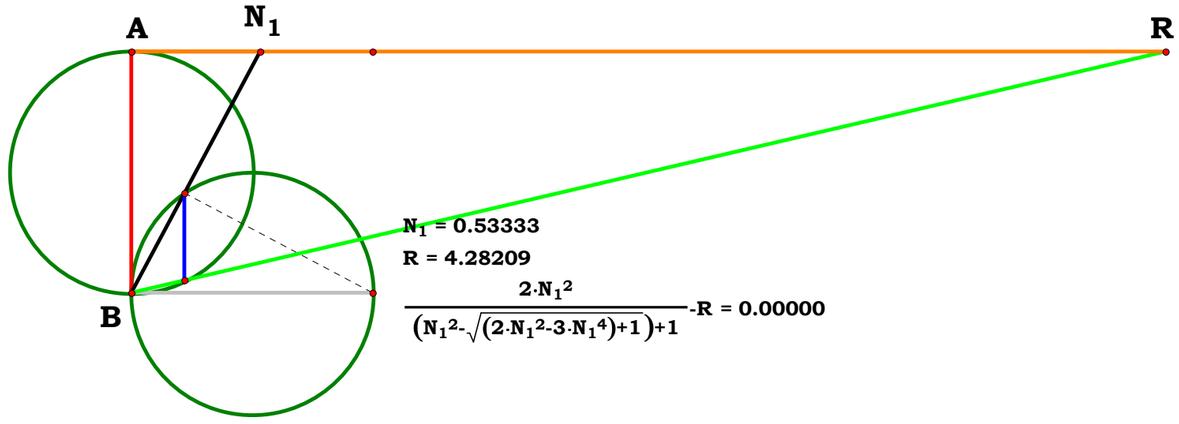
$$R - \frac{2 \cdot N^2}{N^2 - \sqrt{2 \cdot N^2 - 3 \cdot N^4 + 1} + 1} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{2 \cdot N_u^2}{A^2 - \sqrt{(A + N_u) \cdot \left(A^2 + 3 \cdot N_u^2\right) \cdot (A - N_u)} + N_u^2} = 0$$

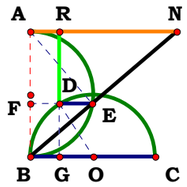
$$N - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Z^2}{Z^2 + q^2 - \sqrt{-3 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 + q^4}} = 0$$



$N_1 = 0.53333$
$R = 4.28209$
$\frac{2 \cdot N_1^2}{\left(N_1^2 - \sqrt{\left(2 \cdot N_1^2 - 3 \cdot N_1^4\right) + 1}\right) + 1} - R = 0.00000$

3OBT10BR0



N = 1.17172
R = 0.23092

Unit. $AB := 1$ Given. $N := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

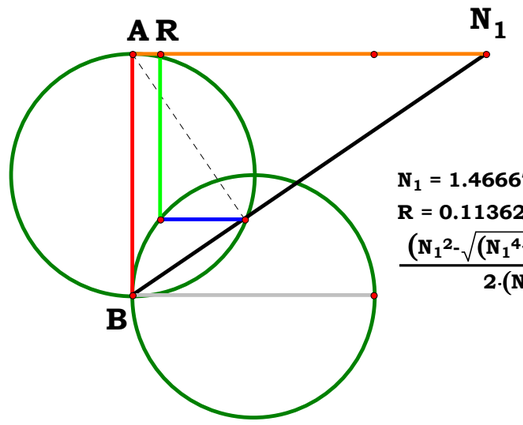
Descriptions.

$BN := \sqrt{N^2 + AB^2}$ $BE := \frac{AB^2}{BN}$

$BF := \frac{AB \cdot BE}{BN}$ $DG := BF$

$GO := \sqrt{\left(\frac{AB}{2}\right)^2 - DG^2}$ $BG := \frac{AB}{2} - GO$

$R := BG$ $R = 0.230918$



$N_1 = 1.46667$

$R = 0.11362$

$\frac{\left(N_1^2 - \sqrt{\left(N_1^4 + 2 \cdot N_1^2\right) - 3}\right) + 1}{2 \cdot \left(N_1^2 + 1\right)} - R = 0.00000$

Definitions.

$R - \frac{N^2 - \sqrt{N^4 + 2 \cdot N^2 - 3} + 1}{2 \cdot \left(N^2 + 1\right)} = 0$

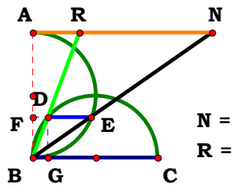
$N - \frac{N_u}{A} = 0$

$R - \frac{A^2 + N_u^2 - \sqrt{\left(N_u - A\right) \cdot \left(A + N_u\right) \cdot \left(3 \cdot A^2 + N_u^2\right)}}{2 \cdot \left(A^2 + N_u^2\right)} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{Z^2 + q^2 - \sqrt{Z^4 + 2 \cdot Z^2 \cdot q^2 - 3 \cdot q^4}}{2 \cdot \left(Z^2 + q^2\right)} = 0$

3OBT10BR1



N = 1.43434
R = 0.37246

Unit. $AB := 1$ Given. $N := 1.43434$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$DG := \frac{1}{N^2+1} \qquad BG := \frac{N^2-\sqrt{N^4+2\cdot N^2-3}+1}{2\cdot\left(N^2+1\right)}$$

$$R := \frac{BG\cdot AB}{DG} \qquad R = 0.372457$$

Definitions.

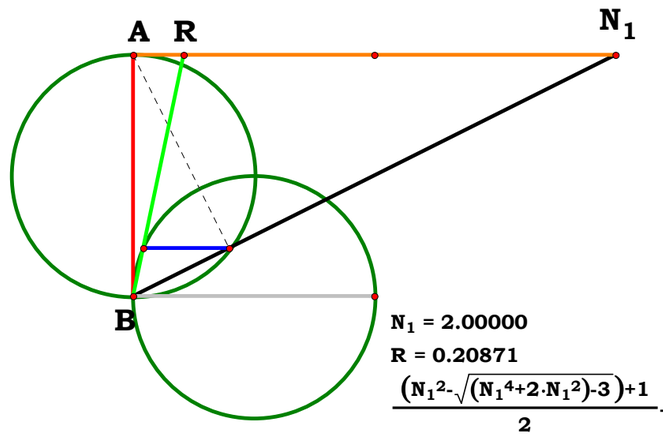
$$R-\frac{N^2-\sqrt{N^4+2\cdot N^2-3}+1}{2}=0$$

$$N-\frac{N_u}{A}=0$$

$$R-\frac{A^2+N_u{}^2-\sqrt{\left[\left(N_u-A\right)\cdot\left(A+N_u\right)\cdot\left(3\cdot A^2+N_u{}^2\right)\right]}}{2\cdot A^2}=0$$

$$N-\frac{Z}{q}=0$$

$$R-\frac{Z^2+q^2-\sqrt{Z^4+2\cdot Z^2\cdot q^2-3\cdot q^4}}{2\cdot q^2}=0$$

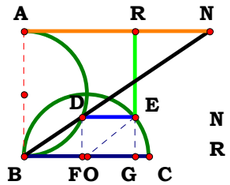


$N_1 = 2.00000$

$R = 0.20871$

$$\frac{\left(N_1{}^2-\sqrt{\left(N_1{}^4+2\cdot N_1{}^2\right)-3}\right)+1}{2}-R = 0.00000$$

3OBT10BR2



N = 1.48485
R = 0.89068

Unit. $AB := 1$ Given. $N := 1.48485$

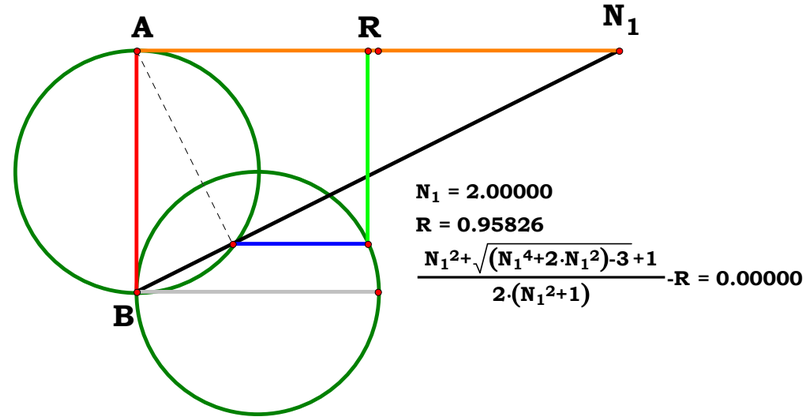
$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$DF := \frac{1}{N^2 + 1}$ $GO := \sqrt{\left(\frac{AB}{2}\right)^2 - DF^2}$

$BG := \frac{AB}{2} + GO$ $R := BG$

$R = 0.890685$



$N_1 = 2.00000$

$R = 0.95826$

$\frac{N_1^2 + \sqrt{(N_1^4 + 2 \cdot N_1^2) - 3} + 1}{2 \cdot (N_1^2 + 1)} - R = 0.00000$

Definitions.

$R - \frac{N^2 + \sqrt{N^4 + 2 \cdot N^2 - 3} + 1}{2 \cdot (N^2 + 1)} = 0$

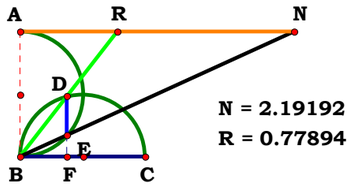
$N - \frac{N_u}{A} = 0$

$R - \frac{A^2 + N_u^2 + \sqrt{2 \cdot A^2 \cdot N_u^2 - 3 \cdot A^4 + N_u^4}}{2 \cdot (A^2 + N_u^2)} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{Z^2 + q^2 + \sqrt{Z^4 + 2 \cdot Z^2 \cdot q^2 - 3 \cdot q^4}}{2 \cdot (Z^2 + q^2)} = 0$

3OBT10BR3



N = 2.19192
R = 0.77894

Unit. $AB := 1$ Given. $N := 2.19192$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$BF := \frac{N}{N^2 + 1}$ $CF := AB - BF$

$DF := \sqrt{BF \cdot CF}$ $R := \frac{BF \cdot AB}{DF}$

$R = 0.778938$

Definitions.

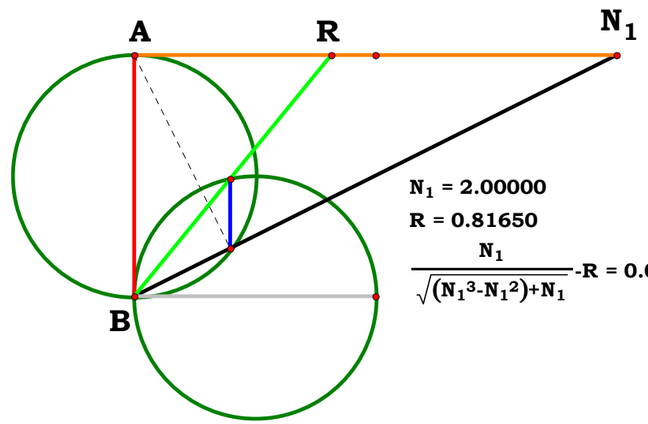
$$R - \frac{N}{\sqrt{N^3 - N^2 + N}} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{A} \cdot N_u}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)}} = 0$$

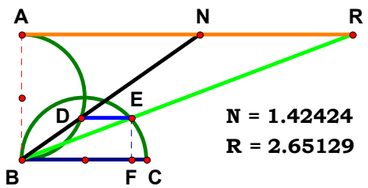
$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot \sqrt{q}}{\sqrt{Z \cdot \left(Z^2 - Z \cdot q + q^2\right)}} = 0$$



$N_1 = 2.00000$
$R = 0.81650$
$\frac{N_1}{\sqrt{(N_1{}^3 - N_1{}^2) + N_1}} - R = 0.00000$

3OBT10BR4



Unit. $AB := 1$ Given. $N := 1.42424$

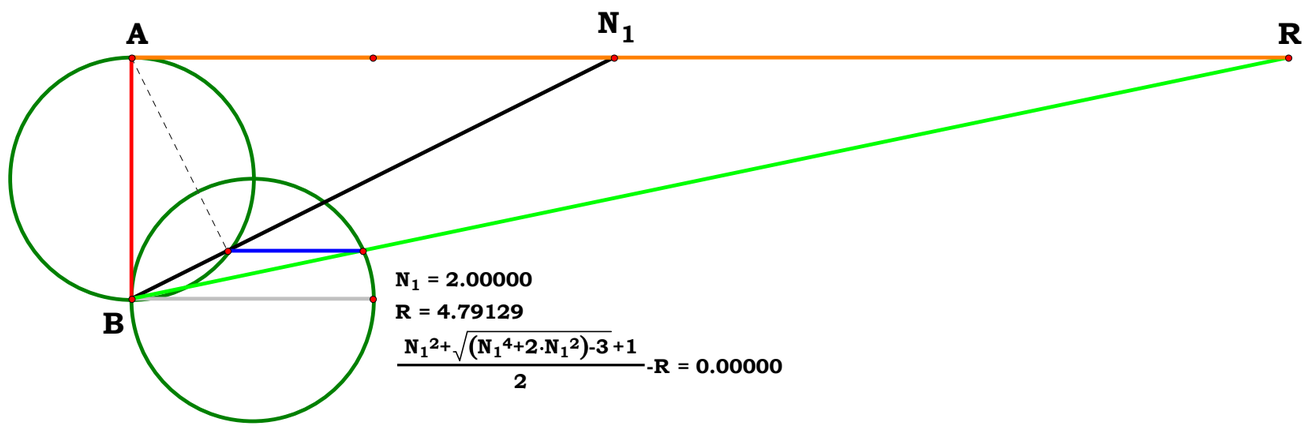
$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$BF := \frac{N^2 + \sqrt{N^4 + 2 \cdot N^2 - 3} + 1}{2 \cdot (N^2 + 1)}$$

$$EF := \frac{1}{N^2 + 1} \qquad R := \frac{BF \cdot AB}{EF}$$

$R = 2.651284$



Definitions.

$$R - \frac{N^2 + \sqrt{N^4 + 2 \cdot N^2 - 3} + 1}{2} = 0$$

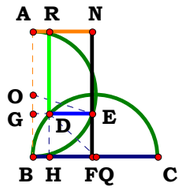
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A^2 + {N_u}^2 + \sqrt{2 \cdot A^2 \cdot {N_u}^2 - 3 \cdot A^4 + {N_u}^4}}{2 \cdot A^2} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{Z^2 + q^2 + \sqrt{Z^4 + 2 \cdot Z^2 \cdot q^2 - 3 \cdot q^4}}{2 \cdot q^2} = 0$$

3OBT10CR0



N = 0.47475
R = 0.13630

Unit. $AB := 1$ Given. $N := .47475$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

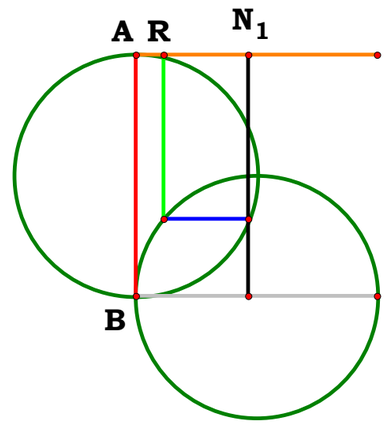
Descriptions.

$EG := N$ $GO := \sqrt{\left(\frac{AB}{2}\right)^2 - EG^2}$

$BG := \frac{AB}{2} - GO$ $DH := BG$

$HQ := \sqrt{\left(\frac{AB}{2}\right)^2 - DH^2}$ $BH := \frac{AB}{2} - HQ$

$R := BH$ $R = 0.136309$



$\frac{1-\sqrt{(4\cdot N_1^2+2\cdot\sqrt{1-4\cdot N_1^2})-1}}{2}-R = 0.00000$

$N_1 = 0.46667$
R = 0.11622

Definitions.

$R - \frac{1-\sqrt{4\cdot N^2+2\cdot\sqrt{1-4\cdot N^2}-1}}{2} = 0$

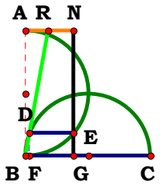
$N - \frac{N_u}{A} = 0$

$R - \frac{A-\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u^2}-A^2+4\cdot N_u^2}}{2\cdot A} = 0$

$N - \frac{Z}{q} = 0$

$R - \frac{q-\sqrt{4\cdot Z^2-q^2+2\cdot q\cdot\sqrt{q^2-4\cdot Z^2}}}{2\cdot q} = 0$

3OBT10CR1



N = 0.38384
R = 0.18578

Unit. $AB := 1$ **Given.** $N := .38384$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$DF := \frac{1-\left(1-4\cdot N^2\right)^{\frac{1}{2}}}{2}$$

$$BF := \frac{1-\sqrt{4\cdot N^2+2\cdot\sqrt{1-4\cdot N^2}-1}}{2}$$

$$R := \frac{BF\cdot AB}{DF} \qquad R = 0.185782$$

Definitions.

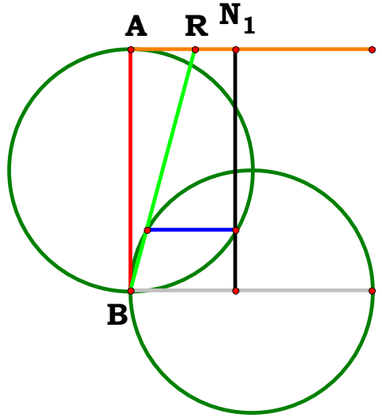
$$R-\frac{\sqrt{4\cdot N^2+2\cdot\sqrt{1-4\cdot N^2}-1}-1}{\sqrt{1-4\cdot N^2}-1}=0$$

$$N-\frac{N_u}{A}=0$$

$$R-\frac{A-\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot {N_u}^2}-A^2+4\cdot {N_u}^2}}{A-\sqrt{A^2-4\cdot {N_u}^2}}=0$$

$$N-\frac{Z}{q}=0$$

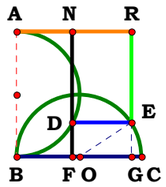
$$R-\frac{q-\sqrt{4\cdot Z^2-q^2+2\cdot q\cdot\sqrt{q^2-4\cdot Z^2}}}{q-\sqrt{q^2-4\cdot Z^2}}=0$$



$N_1 = 0.43333$
$R = 0.26864$

$$\frac{1-\sqrt{\left(4\cdot {N_1}^2+2\cdot\sqrt{1-4\cdot {N_1}^2}\right)-1}}{1-\sqrt{1-4\cdot {N_1}^2}}-R = 0.00000$$

3OBT10CR2



N = 0.44444

R = 0.92023

Unit. $AB := 1$ Given. $N := .44444$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$GO := \frac{\sqrt{4 \cdot N^2 + 2 \cdot \sqrt{1 - 4 \cdot N^2} - 1}}{2}$$

$$BG := \frac{AB}{2} + GO \quad R := BG$$

$R = 0.920234$

Definitions.

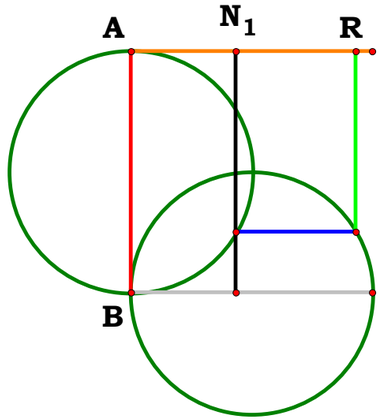
$$R - \frac{1 + \sqrt{4 \cdot N^2 + 2 \cdot \sqrt{1 - 4 \cdot N^2} - 1}}{2} = 0$$

$$N - \frac{N_u}{A} = 0$$

$$R - \frac{A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{2 \cdot A} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{q + \sqrt{4 \cdot Z^2 - q^2 + 2 \cdot q \cdot \sqrt{q^2 - 4 \cdot Z^2}}}{2 \cdot q} = 0$$

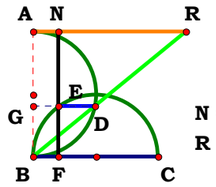


$N_1 = 0.43333$

$R = 0.93269$

$$\frac{1+\sqrt{\left(4 \cdot N_1^2+2 \cdot \sqrt{1-4 \cdot N_1^2}\right)-1}}{2} - R = 0.00000$$

3OBT10CR3



N = 0.20202
R = 1.22091

Unit. $AB := 1$ Given. $N := .20202$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

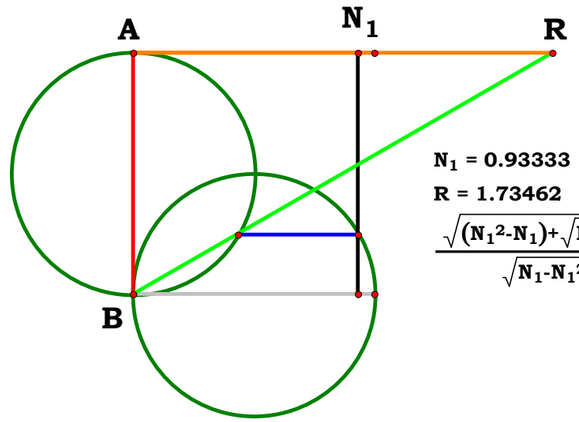
Descriptions.

$BF := N$ $CF := AB - BF$

$EF := \sqrt{BF \cdot CF}$ $BG := EF$

$AG := AB - BG$ $DG := \sqrt{AG \cdot BG}$

$R := \frac{DG \cdot AB}{BG}$ $R = 1.220908$



$N_1 = 0.93333$

$R = 1.73462$

$\frac{\sqrt{(N_1^2 - N_1) + \sqrt{N_1 - N_1^2}}}{\sqrt{N_1 - N_1^2}} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{N^2 - N + \sqrt{N - N^2}}}{\sqrt{N - N^2}} = 0$$

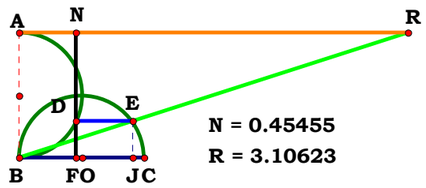
$$N - \frac{N_u}{A} = 0$$

$$R - \frac{\sqrt{N_u^2 - A \cdot N_u + A \cdot \sqrt{N_u \cdot (A - N_u)}}}{\sqrt{N_u \cdot (A - N_u)}} = 0$$

$$N - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{q \cdot \sqrt{Z \cdot (q - Z)} + Z^2 - Z \cdot q}}{\sqrt{Z \cdot (q - Z)}} = 0$$

3OBT10CR4



Unit. $AB := 1$ Given. $N := .45455$

$N_u := 3$ $A := \frac{N_u}{N}$ $Z := 20$ $q := \frac{Z}{N}$

Descriptions.

$$EJ := \frac{1-\sqrt{1-4\cdot N^2}}{2} \qquad OJ := \frac{\sqrt{4\cdot N^2+2\cdot\sqrt{1-4\cdot N^2}-1}}{2}$$

$$BJ := \frac{AB}{2}+OJ \qquad R := \frac{BJ\cdot AB}{EJ}$$

$R = 3.106103$

Definitions.

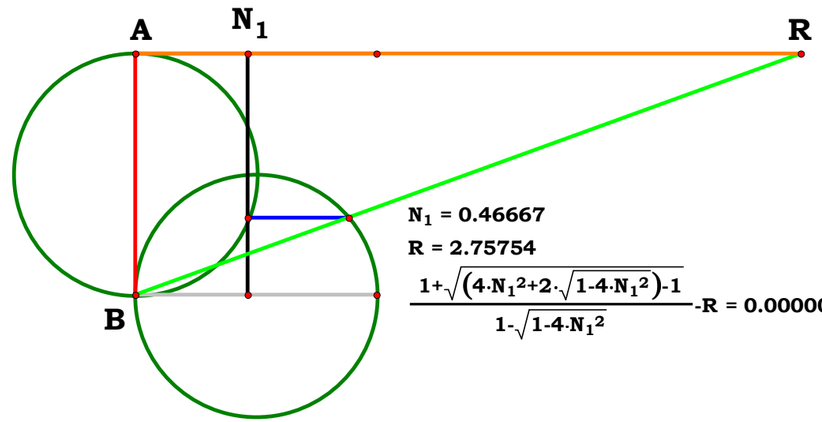
$$R-\frac{1+\sqrt{4\cdot N^2+2\cdot\sqrt{1-4\cdot N^2}-1}}{1-\sqrt{1-4\cdot N^2}}=0$$

$$N-\frac{N_u}{A}=0$$

$$R-\frac{A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}}{A-\sqrt{A^2-4\cdot N_u{}^2}}=0$$

$$N-\frac{Z}{q}=0$$

$$R-\frac{q+\sqrt{4\cdot Z^2-q^2+2\cdot q\cdot\sqrt{q^2-4\cdot Z^2}}}{q-\sqrt{q^2-4\cdot Z^2}}=0$$

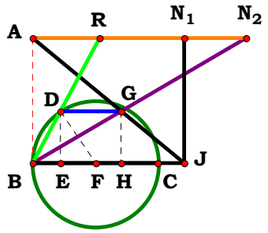


$N_1 = 0.46667$

$R = 2.75754$

$$\frac{1+\sqrt{\left(4\cdot N_1{}^2+2\cdot\sqrt{1-4\cdot N_1{}^2}\right)-1}}{1-\sqrt{1-4\cdot N_1{}^2}}-R = 0.00000$$

3OBT11R0



$N_1 = 1.21212$
$N_2 = 1.70707$
$R = 0.53333$

Unit. $AB := 1$ Given. $N_1 := 1.21212$ $N_2 := 1.70707$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

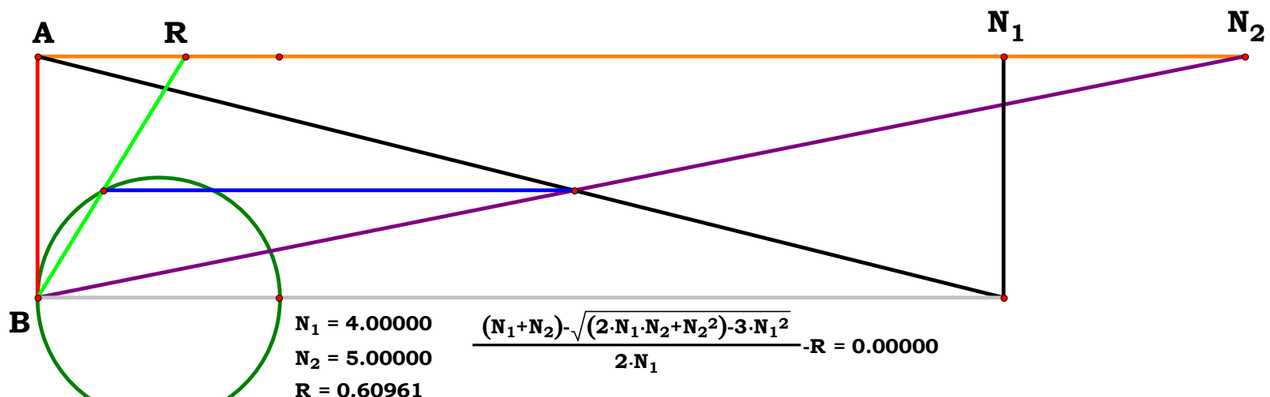
$BH := \frac{N_2 \cdot N_1}{N_2 + N_1}$ $GH := \frac{BH}{N_2}$

$BE := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - GH^2}$ $R := \frac{BE}{GH}$

$R = 0.533333$

Definitions.

$$R - \frac{N_1 + N_2 - \sqrt{2 \cdot N_1 \cdot N_2 + N_2^2 - 3 \cdot N_1^2}}{2 \cdot N_1} = 0$$



$N_1 = 4.00000$
$N_2 = 5.00000$
$R = 0.60961$

$\frac{(N_1+N_2)-\sqrt{(2 \cdot N_1 \cdot N_2+N_2^2)-3 \cdot N_1^2}}{2 \cdot N_1} - R = 0.00000$

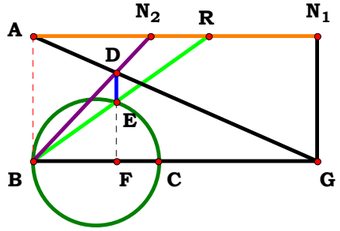
$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot B} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_1 + N_2 - \sqrt{2 \cdot N_1 \cdot N_2 + N_2^2 - 3 \cdot N_1^2}}{2 \cdot N_1} = 0$$

3OBT11R1



$N_1 = 2.27273$
$N_2 = 0.93939$
$R = 1.40787$

Unit. $AB := 1$ Given. $N_1 := 2.27273$ $N_2 := .93939$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$BF := \frac{N_2 \cdot N_1}{N_2 + N_1}$ $ef := \sqrt{BF \cdot (AB - BF)}$

$R := \frac{BF}{ef}$ $R = 1.407864$

Definitions.

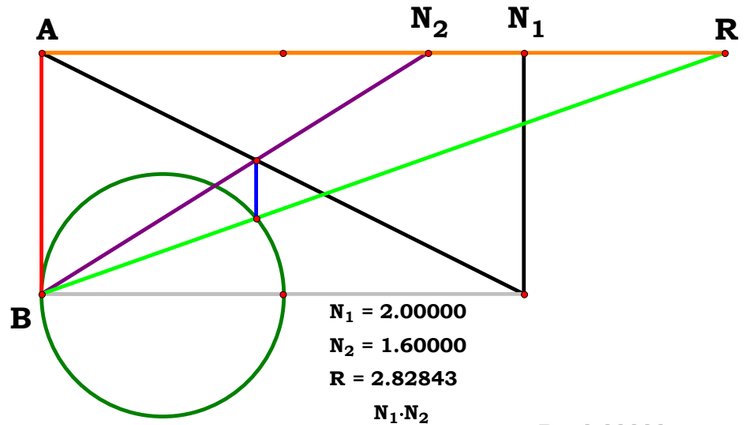
$$R - \frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot (N_1 + N_2 - N_1 \cdot N_2)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u}{\sqrt{N_u \cdot (A + B - N_u)}} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

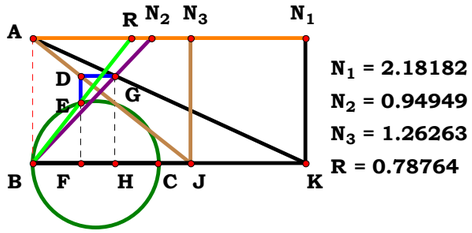
$$R - \frac{Y \cdot Z}{\sqrt{Y \cdot Z \cdot (Y \cdot q - Y \cdot Z + Z \cdot p)}} = 0$$



$N_1 = 2.00000$
$N_2 = 1.60000$
$R = 2.82843$

$$\frac{N_1 \cdot N_2}{\sqrt{N_1 \cdot N_2 \cdot ((N_1 + N_2) - N_1 \cdot N_2)}} - R = 0.00000$$

3OBT11R2



$N_1 = 2.18182$
$N_2 = 0.94949$
$N_3 = 1.26263$
$R = 0.78764$

Unit. $AB := 1$ **Given.** $N_1 := 2.18182$ $N_2 := .94949$ $N_3 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

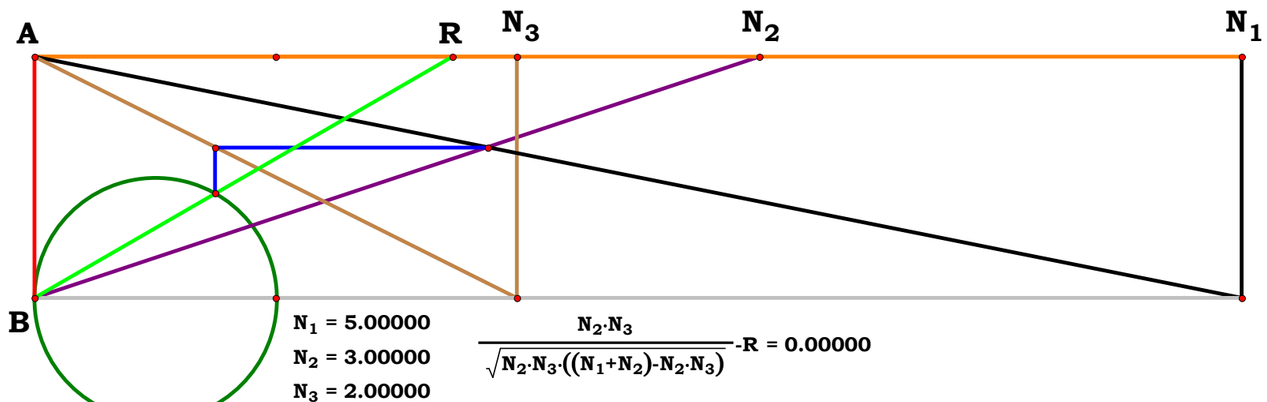
Descriptions.

$BH := \frac{N_2 \cdot N_1}{N_2 + N_1}$ $GH := \frac{BH}{N_2}$

$BF := N_3 - N_3 \cdot GH$ $EF := \sqrt{BF \cdot (AB - BF)}$

$R := \frac{BF}{EF}$ $R = 0.787641$

$Boolean := \frac{EF^2 + \sqrt{EF^4}}{2\sqrt{EF^4}}$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$R = 1.73205$

$\frac{N_2 \cdot N_3}{\sqrt{N_2 \cdot N_3 \cdot ((N_1 + N_2) - N_2 \cdot N_3)}} - R = 0.00000$

Definitions.

Boolean $= 1$

$R - \frac{N_2 \cdot N_3}{\sqrt{N_2 \cdot N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)}} = 0$

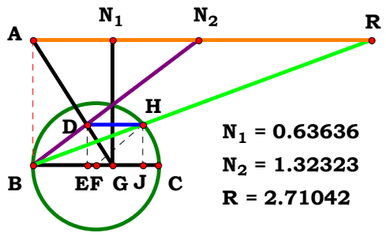
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{A} \cdot N_u}{\sqrt{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot \sqrt{o}}{\sqrt{Y \cdot Z \cdot (X \cdot p \cdot q - Y \cdot Z \cdot o + Y \cdot o \cdot q)}} = 0$

3OBT11R3



Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

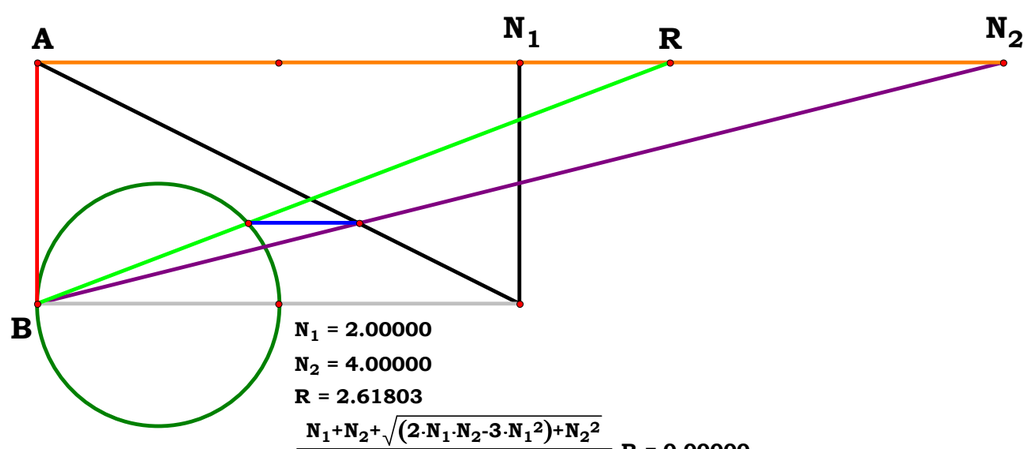
$$BE := \frac{N_2 \cdot N_1}{N_2 + N_1} \qquad DE := \frac{BE}{N_2}$$

$$JC := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2} \qquad BJ := AB - JC$$

$$R := \frac{BJ}{DE} \qquad R = 2.710428$$

Definitions.

$$R - \frac{N_1 + N_2 + \sqrt{2 \cdot N_1 \cdot N_2 - 3 \cdot N_1^2 + N_2^2}}{2 \cdot N_1} = 0$$



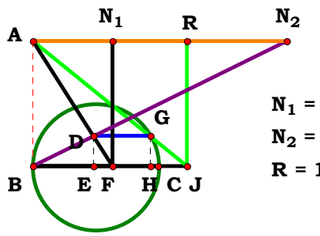
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot B} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q + Z \cdot p + \sqrt{2 \cdot Y \cdot Z \cdot p \cdot q - 3 \cdot Y^2 \cdot q^2 + Z^2 \cdot p^2}}{2 \cdot Y \cdot q} = 0$$

3OBT11R4



$N_1 = 0.63636$

$N_2 = 2.03030$

$R = 1.23381$

Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 2.03030$

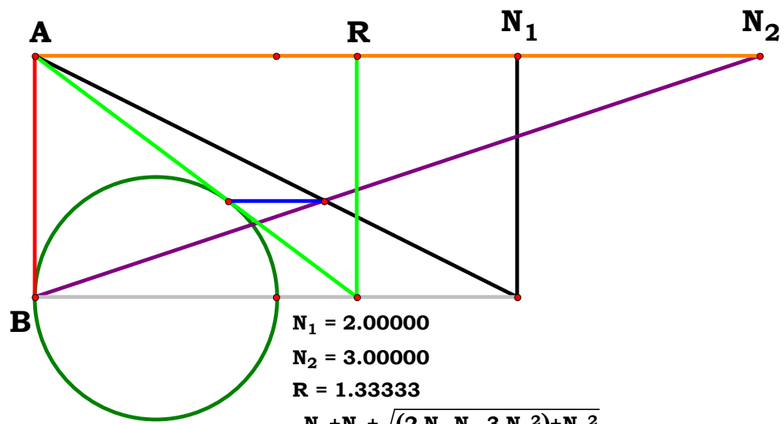
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$BE := \frac{N_1 \cdot N_2}{N_1 + N_2} \quad DE := \frac{BE}{N_2}$$

$$BH := AB - \left[\frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2}\right] \quad R := \frac{BH}{AB - DE}$$

$R = 1.233809$



$N_1 = 2.00000$

$N_2 = 3.00000$

$R = 1.33333$

$$\frac{N_1+N_2+\sqrt{(2\cdot N_1\cdot N_2-3\cdot N_1^2)+N_2^2}}{2\cdot N_2}-R = 0.00000$$

Definitions.

$$R - \frac{N_1 + N_2 + \sqrt{2 \cdot N_1 \cdot N_2 - 3 \cdot N_1^2 + N_2^2}}{2 \cdot N_2} = 0$$

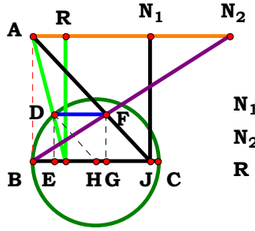
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot A} = 0$$

$$N_1 - \frac{Y}{p} = 0 \quad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q + Z \cdot p + \sqrt{2 \cdot Y \cdot Z \cdot p \cdot q - 3 \cdot Y^2 \cdot q^2 + Z^2 \cdot p^2}}{2 \cdot Z \cdot p} = 0$$

3OBT11R5



$N_1 = 0.93939$

$N_2 = 1.57576$

$R = 0.26749$

Unit. $AB := 1$ Given. $N_1 := .93939$ $N_2 := 1.57576$

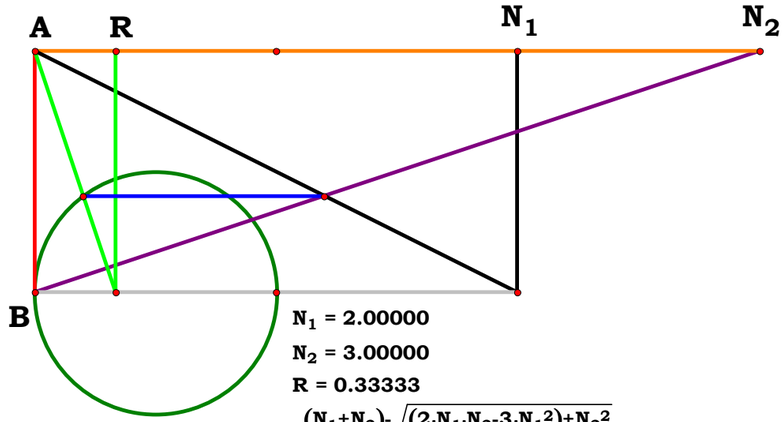
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$bg := \frac{N_1 \cdot N_2}{N_1 + N_2} \qquad fg := \frac{bg}{N_2}$$

$$be := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - fg^2} \qquad R := \frac{be}{1 - fg}$$

$R = 0.267482$



$N_1 = 2.00000$

$N_2 = 3.00000$

$R = 0.33333$

$\frac{(N_1+N_2)-\sqrt{(2\cdot N_1\cdot N_2-3\cdot N_1{}^2)+N_2{}^2}}{2\cdot N_2}$-R = 0.00000

Definitions.

$$R - \frac{N_1 + N_2 - \sqrt{2 \cdot N_1 \cdot N_2 - 3 \cdot N_1{}^2 + N_2{}^2}}{2 \cdot N_2} = 0$$

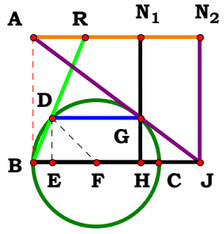
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot A} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q + Z \cdot p - \sqrt{-3 \cdot Y^2 \cdot q^2 + 2 \cdot Y \cdot Z \cdot p \cdot q + Z^2 \cdot p^2}}{2 \cdot Z \cdot p} = 0$$

3OBT11R6



$N_1 = 0.85859$
$N_2 = 1.33333$
$R = 0.41839$

Unit. $AB := 1$ Given. $N_1 := .85859$ $N_2 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$GH := \frac{N_2 - N_1}{N_2} \qquad BE := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - GH^2}$$

$$R := \frac{BE}{GH} \qquad R = 0.418381$$

Definitions.

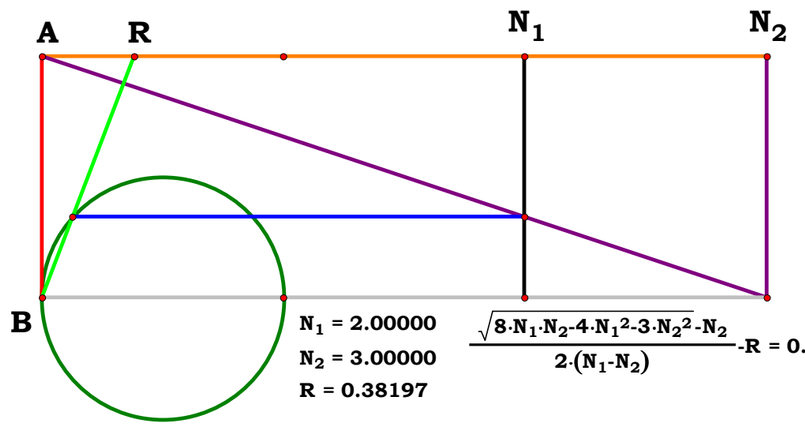
$$R - \frac{\sqrt{8 \cdot N_1 \cdot N_2 - 4 \cdot N_1^2 - 3 \cdot N_2^2} - N_2}{2 \cdot (N_1 - N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A - \sqrt{(2 \cdot B - A) \cdot (3 \cdot A - 2 \cdot B)}}{2 \cdot (A - B)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

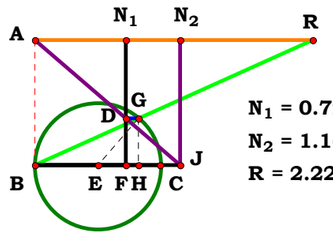
$$R - \frac{Z \cdot p - \sqrt{(Z \cdot p - 2 \cdot Y \cdot q) \cdot (2 \cdot Y \cdot q - 3 \cdot Z \cdot p)}}{2 \cdot (Z \cdot p - Y \cdot q)} = 0$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 0.38197$

$$\frac{\sqrt{8 \cdot N_1 \cdot N_2 - 4 \cdot N_1^2 - 3 \cdot N_2^2} - N_2}{2 \cdot (N_1 - N_2)} - R = 0.00000$$

3OBT11R7



$N_1 = 0.72727$
$N_2 = 1.16162$
$R = 2.22498$

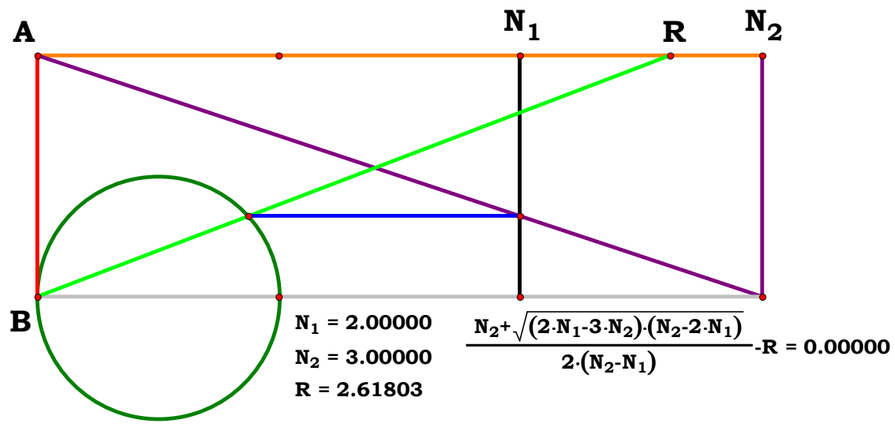
Unit. $AB := 1$ **Given.** $N_1 := .72727$ $N_2 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$DF := 1 - \frac{N_1}{N_2}$ $BH := AB - \frac{AB}{2} + \sqrt{\left(\frac{AB}{2}\right)^2 - DF^2}$

$R := \frac{BH}{DF}$ $R = 2.224936$



$N_1 = 2.00000$
$N_2 = 3.00000$
$R = 2.61803$

$\frac{N_2+\sqrt{(2\cdot N_1-3\cdot N_2)\cdot(N_2-2\cdot N_1)}}{2\cdot(N_2-N_1)}-R = 0.00000$

Definitions.

$$R - \frac{N_2 + \sqrt{(2\cdot N_1 - 3\cdot N_2)\cdot(N_2 - 2\cdot N_1)}}{2\cdot(N_2 - N_1)} = 0$$

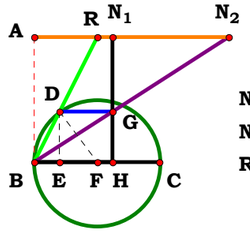
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{A + \sqrt{(2\cdot B - A)\cdot(3\cdot A - 2\cdot B)}}{2\cdot(A - B)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{(Z\cdot p - 2\cdot Y\cdot q)\cdot(2\cdot Y\cdot q - 3\cdot Z\cdot p)} + Z\cdot p}{2\cdot(Z\cdot p - Y\cdot q)} = 0$$

3OBT11R8



$N_1 = 0.62626$
$N_2 = 1.55556$
$R = 0.50545$

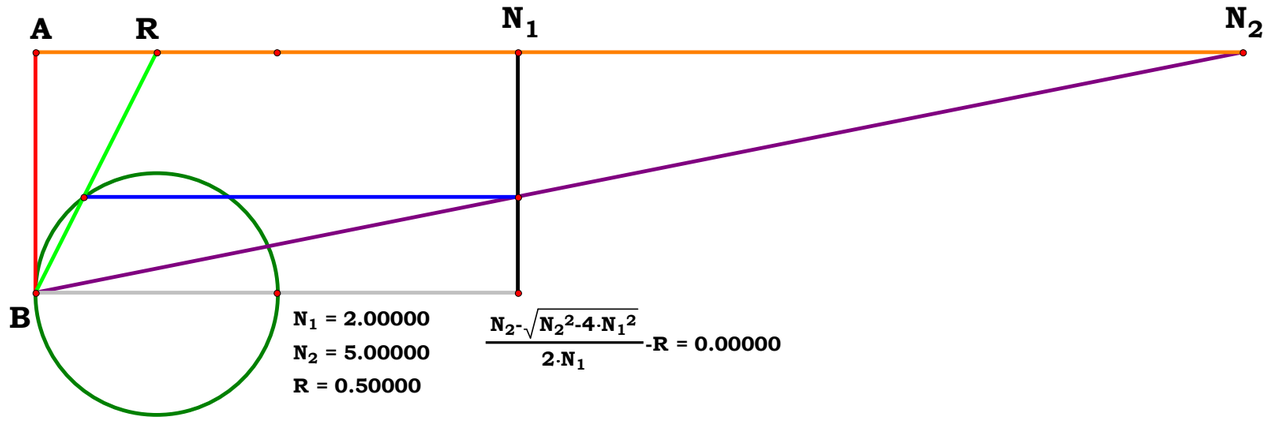
Unit. $AB := 1$ Given. $N_1 := .62626$ $N_2 := 1.55556$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$GH := \frac{N_1}{N_2} \qquad BE := \frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - GH^2}$$

$$R := \frac{BE}{GH} \qquad R = 0.505449$$



Definitions.

$$R - \frac{N_2 - \sqrt{N_2^2 - 4 \cdot N_1^2}}{2 \cdot N_1} = 0$$

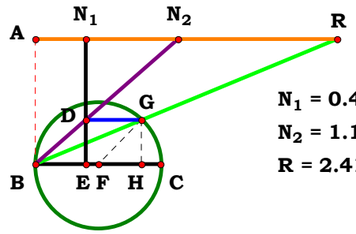
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A - \sqrt{(A - 2 \cdot B) \cdot (A + 2 \cdot B)}}{2 \cdot B} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot p - \sqrt{Z^2 \cdot p^2 - 4 \cdot Y^2 \cdot q^2}}{2 \cdot Y \cdot q} = 0$$

3OBT11R9



$N_1 = 0.40404$
$N_2 = 1.14141$
$R = 2.41008$

Unit. $AB := 1$ Given. $N_1 := .40404$ $N_2 := 1.14141$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$$DE := \frac{N_1}{N_2} \qquad BH := AB - \left[\frac{AB}{2} - \sqrt{\left(\frac{AB}{2}\right)^2 - DE^2}\right]$$

$$R := \frac{BH}{DE} \qquad R = 2.410066$$

Definitions.

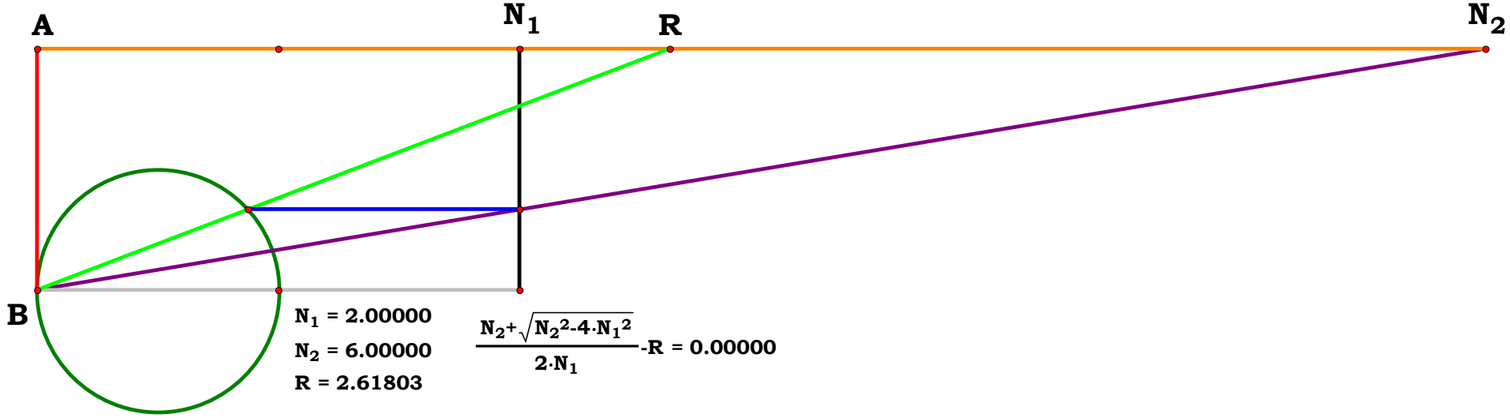
$$R - \frac{N_2 + \sqrt{N_2^2 - 4 \cdot N_1^2}}{2 \cdot N_1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{A + \sqrt{A^2 - 4 \cdot B^2}}{2 \cdot B} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot p + \sqrt{Z^2 \cdot p^2 - 4 \cdot Y^2 \cdot q^2}}{2 \cdot Y \cdot q} = 0$$



$N_1 = 2.00000$
$N_2 = 6.00000$
$R = 2.61803$

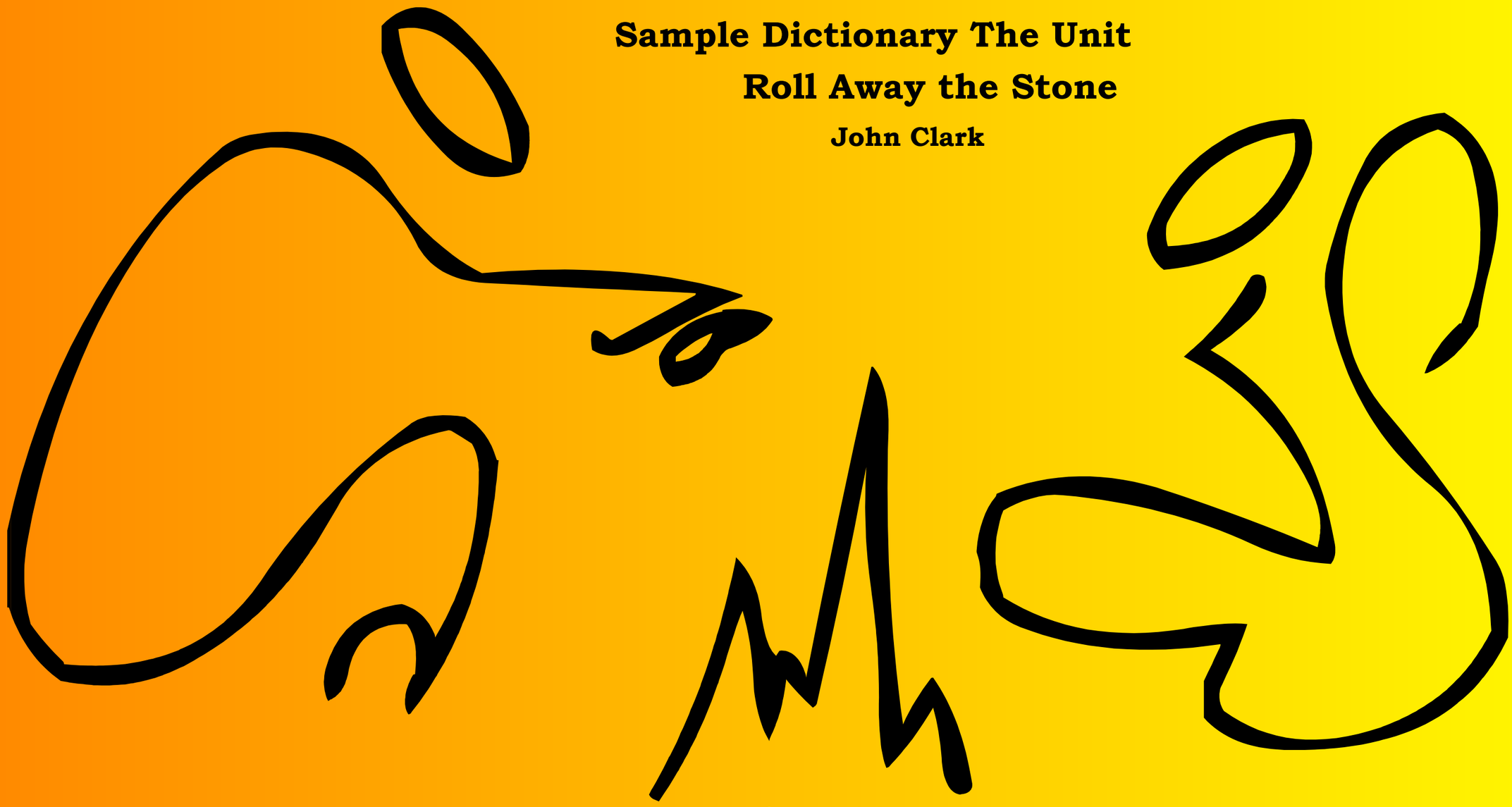
$\frac{N_2+\sqrt{N_2^2-4 \cdot N_1^2}}{2 \cdot N_1} - R = 0.00000$

Basic Analog Grammar

Sample Dictionary The Unit

Roll Away the Stone

John Clark



John 312

Branch One.

Unit.

$AB := 1$

Given.

$N_1 := 1.16207$

$N_2 := .63656$

Descriptions.

$$CE := AB - \frac{N_2}{N_1} \qquad AC := CE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

Definitions.

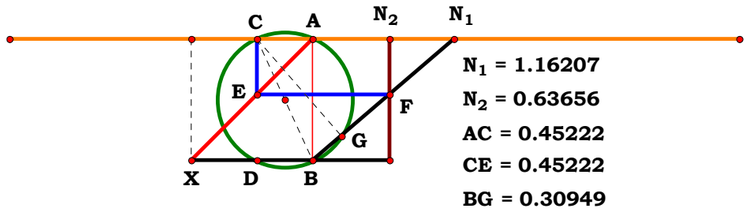
$$CE - \frac{N_1 - N_2}{N_1} = 0 \qquad CE = 0.452219$$

$$AC - \frac{N_1 - N_2}{N_1} = 0 \qquad AC = 0.452219$$

$$BG - \frac{N_2 - N_1 + 1}{\sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.309496$$

Introduction to Roll Away the Stone.

Using a six sample set.



Motions in Roll Away the Stone.

The motion of the circle, or stone, in Roll Away the Stone can be accomplished by any number of structures, I just use a simple sample set in this work.

One of the greatest errors by so called mathematicians is when they ask, how does one compute, or manipulate the indexing system of mathematics to account for such things as time, space, motion, which, in of themselves are not things. Each and every one are just some material difference. One cannot predicate of a predicate no matter what predicate it is. One can no more claim that time slows down, space bends, or motion moves than any other element of a thing. Indexing systems work with any difference using any boundaries and the indexing system is not modified or manipulated any differently for any particular one of them. The indexing system is universal or capable of complete induction, a concept which seems to be on the lips of mathematicians but often lacking in their mind. A mathematician cannot help but to produce fantasy or gibberish and teach that gibberish or fantasy no more than a religious fanatic when basic concepts are not resident in the mind, I do not care if you call them Newton or Einstein or that one preaches that gibberish in the most prestigious colleges and universities.

Branch Two.

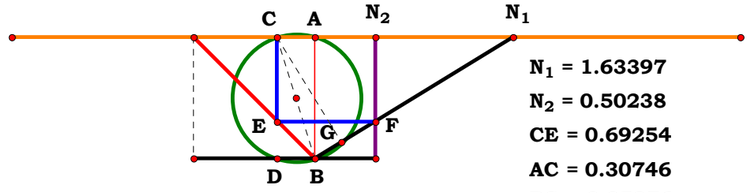
Unit.

$AB := 1$

Given.

$N_1 := 1.63397$

$N_2 := .50238$



$N_1 = 1.63397$

$N_2 = 0.50238$

$CE = 0.69254$

$AC = 0.30746$

$BG = 0.25976$

Descriptions.

$$CE := AB - \frac{N_2}{N_1} \qquad AC := AB - CE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

Definitions.

$$CE - \frac{N_1 - N_2}{N_1} = 0 \qquad CE = 0.69254$$

$$AC - \frac{N_2}{N_1} = 0 \qquad AC = 0.30746$$

$$BG - \frac{1 - N_2}{\sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.259761$$

Branch Three.

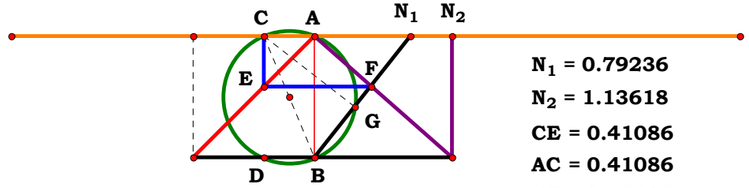
Unit.

$AB := 1$

Given.

$N_1 := .79236$

$N_2 := 1.13618$



$N_1 = 0.79236$

$N_2 = 1.13618$

$CE = 0.41086$

$AC = 0.41086$

$BG = 0.52862$

Descriptions.

$$CE := \frac{N_1}{N_1 + N_2} \qquad AC := CE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

Definitions.

$$CE - \frac{N_1}{N_1 + N_2} = 0 \qquad CE = 0.41086$$

$$AC - \frac{N_1}{N_1 + N_2} = 0 \qquad AC = 0.41086$$

$$BG - \frac{N_1 - N_1^2 + N_2}{(N_1 + N_2) \cdot \sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.528622$$

Branch Four.

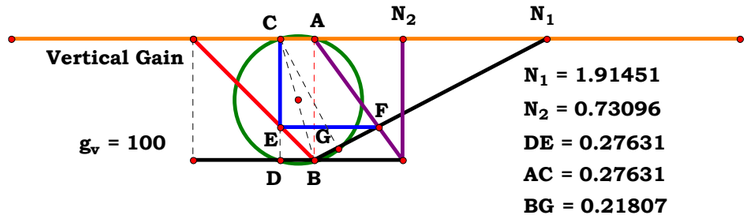
Unit.

$AB := 1$

Given.

$N_1 := 1.91451$

$N_2 := .73096$



Descriptions.

$$DE := \frac{N_2}{N_1 + N_2} \qquad AC := DE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

Definitions.

$$DE - \frac{N_2}{N_1 + N_2} = 0 \qquad DE = 0.276306$$

$$AC - \frac{N_2}{N_1 + N_2} = 0 \qquad AC = 0.276306$$

$$BG - \frac{N_1 + N_2 - N_1 \cdot N_2}{(N_1 + N_2) \cdot \sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.218066$$

Branch Five.

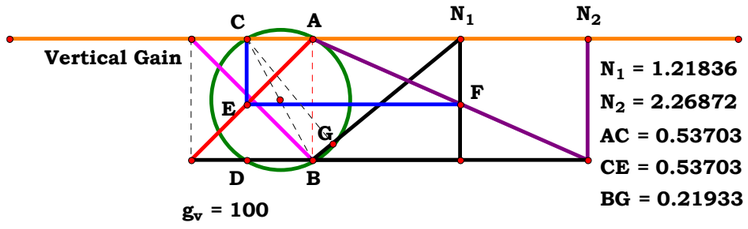
Unit.

$AB := 1$

Given.

$N_1 := 1.21836$

$N_2 := 2.26872$



Descriptions.

$$CE := AB - \frac{N_2 - N_1}{N_2} \qquad AC := CE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

Definitions.

$$CE - \frac{N_1}{N_2} = 0 \qquad CE = 0.537025$$

$$AC - \frac{N_1}{N_2} = 0 \qquad AC = 0.537025$$

$$BG - \frac{N_2 - N_1^2}{N_2 \cdot \sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.219331$$

Branch Six.

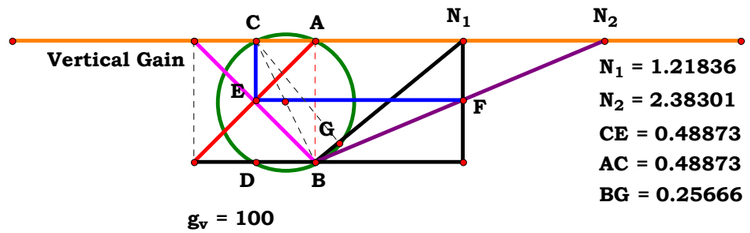
Unit.

$AB := 1$

Given.

$N_1 := 1.21836$

$N_2 := 2.38301$



Descriptions.

$$CE := \frac{N_2 - N_1}{N_2} \qquad AC := CE$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad GN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BG := BN_1 - GN_1$$

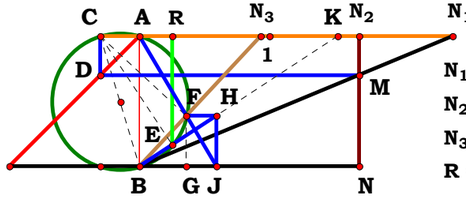
Definitions.

$$CE - \frac{N_2 - N_1}{N_2} = 0 \qquad CE = 0.488731$$

$$AC - \frac{N_2 - N_1}{N_2} = 0 \qquad AC = 0.488731$$

$$BG - \frac{N_1^2 - N_1 \cdot N_2 + N_2}{N_2 \cdot \sqrt{N_1^2 + 1}} = 0 \qquad BG = 0.256662$$

4RST1AB1R0



$N_1 = 2.39948$
$N_2 = 1.68273$
$N_3 = 0.93197$
$R = 0.25102$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.68273$ $N_3 := .93197$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$FN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BF := BN_3 - FN_3$ $FG := \frac{AB \cdot BF}{BN_3}$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $GJ := \frac{BG \cdot BF}{FN_3}$ $BJ := BG + GJ$

$HJ := FG$ $AK := \frac{BJ \cdot AB}{HJ}$ $BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$ $EK := \frac{AK \cdot CK}{BK}$ $BE := BK - EK$

$R := \frac{AK \cdot BE}{BK}$ $R = 0.251022$

Definitions.

$$R - \frac{N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(1 - AC \cdot N_3\right)}{AC^2 + 2 \cdot AC \cdot N_3 + N_3^4 + 3 \cdot N_3^2 + 1} = 0$$

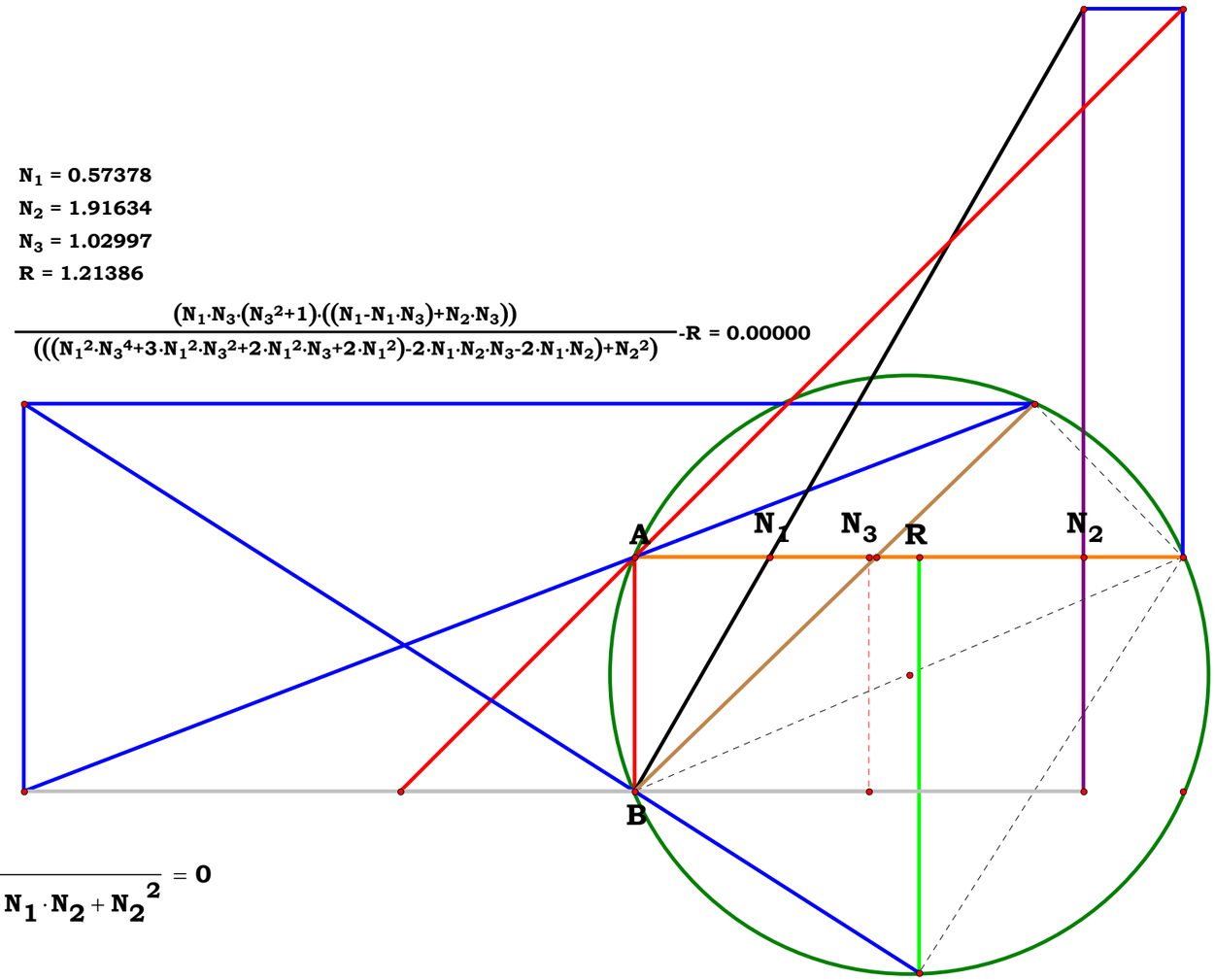
$$R - \frac{N_1 \cdot N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)}{N_1^2 \cdot N_3^4 + 3 \cdot N_1^2 \cdot N_3^2 + 2 \cdot N_1^2 \cdot N_3 + 2 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_2 + N_2^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)}{B^2 \cdot N_u^4 + 3 \cdot B^2 \cdot C^2 \cdot N_u^2 - 2 \cdot N_u \cdot B \cdot C^3 \cdot (A - B) + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right)} = 0$$

$N_1 = 0.57378$
$N_2 = 1.91634$
$N_3 = 1.02997$
$R = 1.21386$

$$\frac{(N_1 \cdot N_3 \cdot (N_3{}^2+1) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))}{(((N_1{}^2 \cdot N_3{}^4 + 3 \cdot N_1{}^2 \cdot N_3{}^2 + 2 \cdot N_1{}^2 \cdot N_3 + 2 \cdot N_1{}^2) - 2 \cdot N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_2) + N_2{}^2)} - R = 0.00000$$



$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Z \cdot p \cdot \left(Z^2 + q^2\right) \cdot (Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q)}{X^2 \cdot p^2 \cdot \left(Z^4 + 3 \cdot Z^2 \cdot q^2 + 2 \cdot Z \cdot q^3 + 2 \cdot q^4\right) - 2 \cdot X \cdot Y \cdot o \cdot p \cdot q^3 \cdot (Z + q) + Y^2 \cdot o^2 \cdot q^4} = 0$$

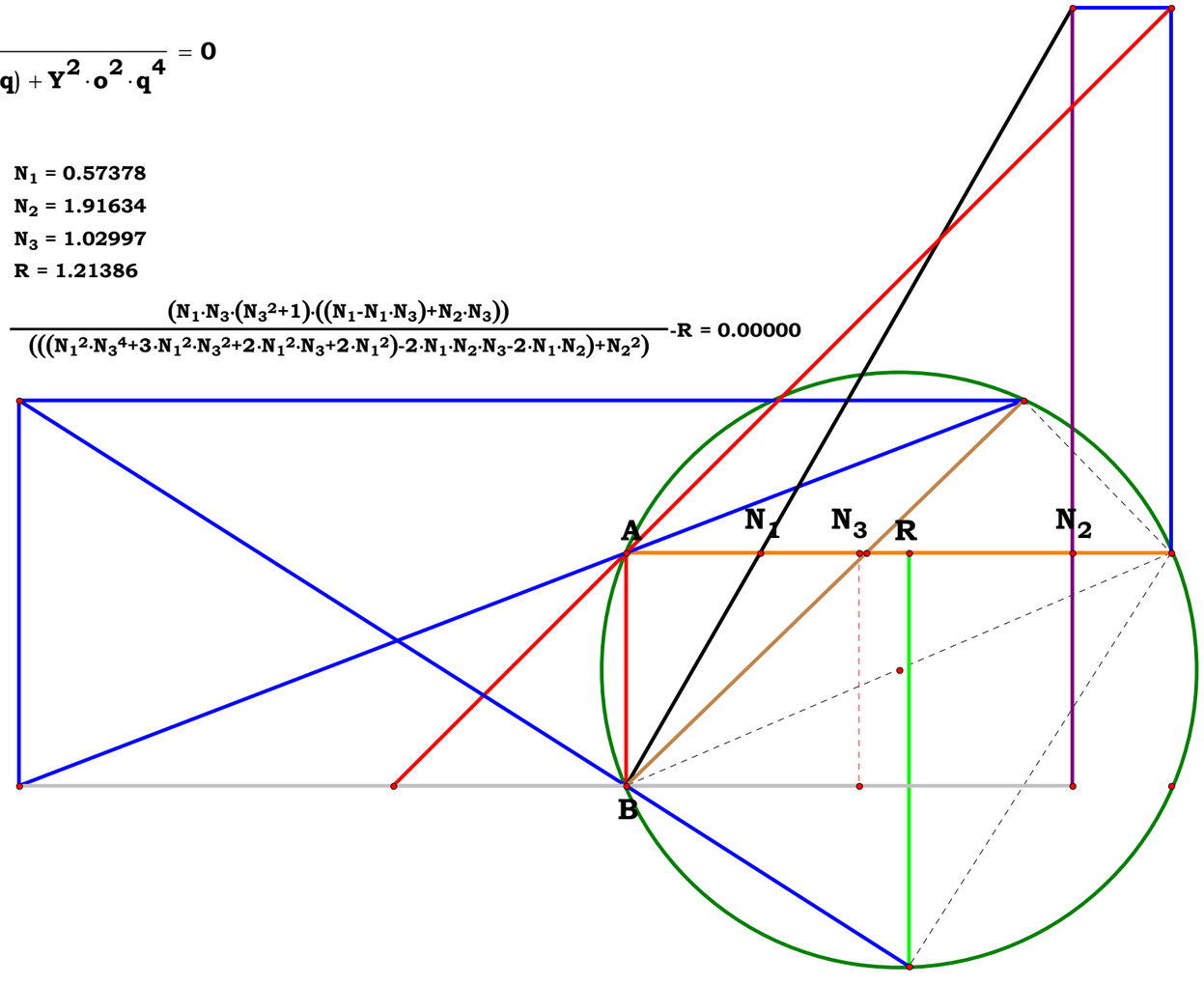
$N_1 = 0.57378$

$N_2 = 1.91634$

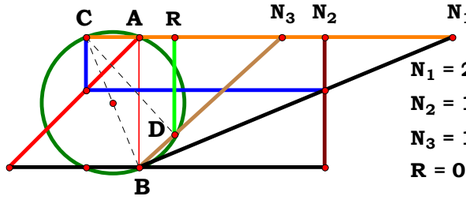
$N_3 = 1.02997$

$R = 1.21386$

$$\frac{(N_1 \cdot N_3 \cdot (N_3{}^2+1) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))}{(((N_1{}^2 \cdot N_3{}^4 + 3 \cdot N_1{}^2 \cdot N_3{}^2 + 2 \cdot N_1{}^2 \cdot N_3 + 2 \cdot N_1{}^2) - 2 \cdot N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_2) + N_2{}^2)} - R = 0.00000$$



4RST1AB1R1



$N_1 = 2.39948$

$N_2 = 1.42122$

$N_3 = 1.09663$

$R = 0.27528$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $R := \frac{N_3 \cdot BD}{BN_3}$

$R = 0.275282$

Definitions.

$R - \frac{N_3 \cdot (1 - AC \cdot N_3)}{N_3^2 + 1} = 0$

$R - \frac{N_3 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)}{N_1 \cdot (N_3^2 + 1)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}{B \cdot (C^2 + N_u^2)} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot (Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q)}{X \cdot p \cdot (Z^2 + q^2)} = 0$

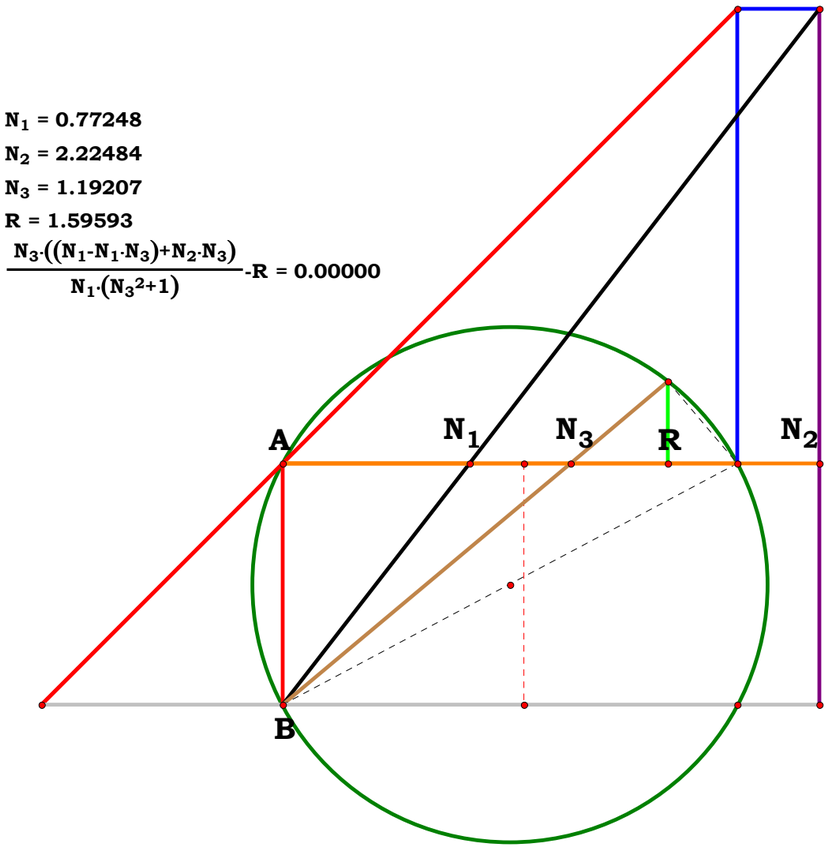
$N_1 = 0.77248$

$N_2 = 2.22484$

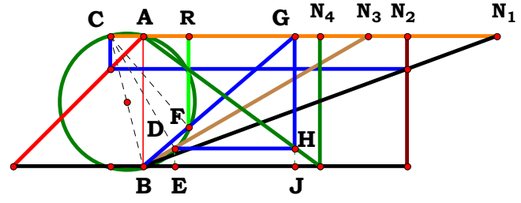
$N_3 = 1.19207$

$R = 1.59593$

$\frac{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)}{N_1 \cdot (N_3^2 + 1)} - R = 0.00000$



4RST1AB1R2



$N_1 = 2.70943$
$N_2 = 2.02174$
$N_3 = 1.72621$
$N_4 = 1.35578$
$R = 0.34819$

Unit. $AB := 1$ Given. $N_1 := 2.70943$ $N_2 := 2.02174$ $N_3 := 1.72621$ $N_4 := 1.35578$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

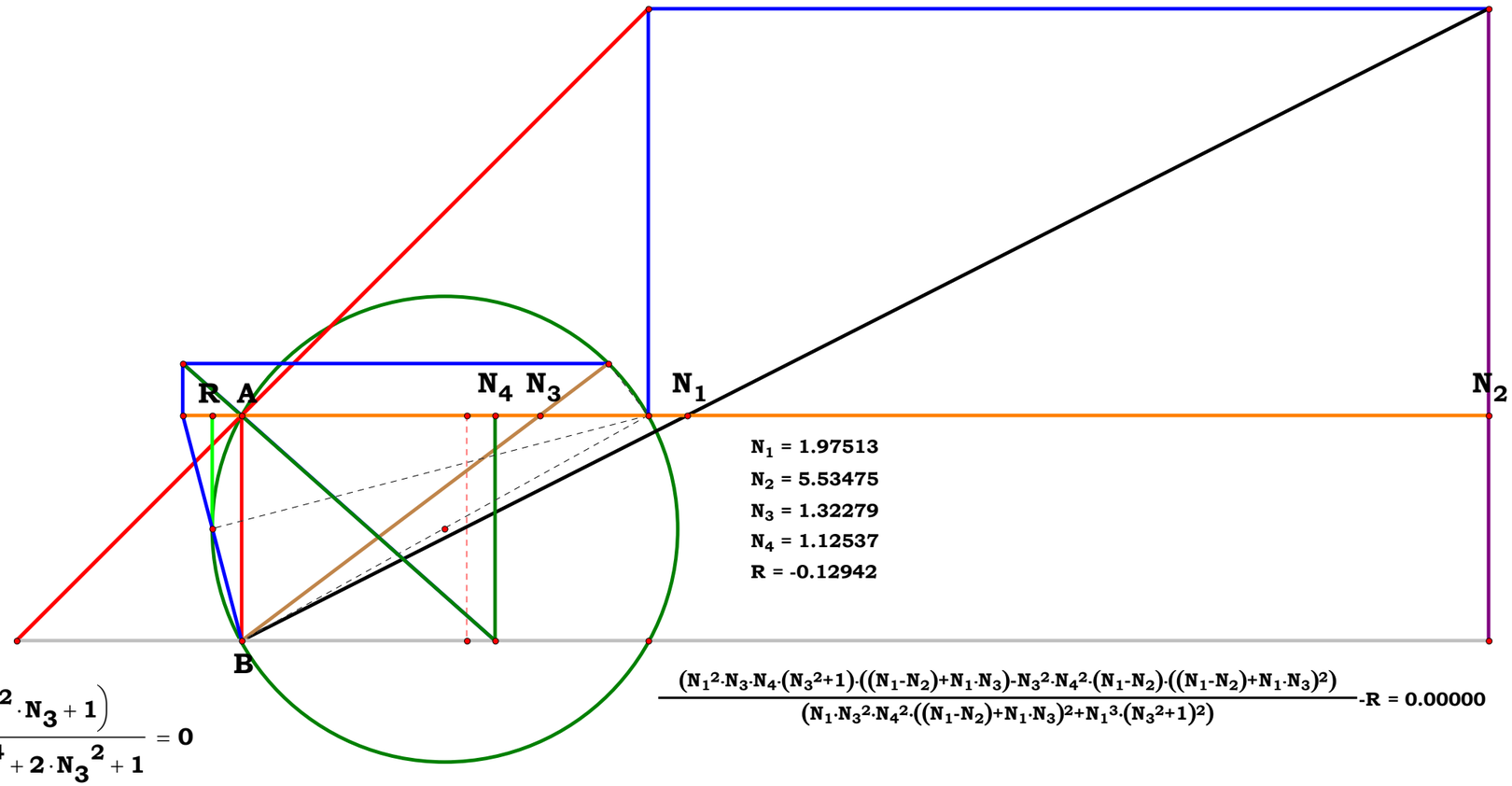
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := AB \cdot \left(\frac{BN_3 - EN_3}{BN_3} \right)$ $AG := N_4 \cdot (AB - EF)$

$BG := \sqrt{AG^2 + AB^2}$ $CG := AG + AC$

$FG := \frac{AG \cdot CG}{BG}$ $R := AG \cdot \left(\frac{BG - FG}{BG} \right)$

$R = 0.348194$



$N_1 = 1.97513$
$N_2 = 5.53475$
$N_3 = 1.32279$
$N_4 = 1.12537$
$R = -0.12942$

$$\frac{(N_1^2 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot ((N_1-N_2)+N_1 \cdot N_3) - N_3^2 \cdot N_4^2 \cdot (N_1-N_2) \cdot ((N_1-N_2)+N_1 \cdot N_3)^2)}{(N_1 \cdot N_3^2 \cdot N_4^2 \cdot ((N_1-N_2)+N_1 \cdot N_3)^2 + N_1^3 \cdot (N_3^2+1)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3) \cdot (N_3^2 - N_4 \cdot AC \cdot N_3^2 - N_4 \cdot AC^2 \cdot N_3 + 1)}{AC^2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot AC \cdot N_3^3 \cdot N_4^2 + N_3^4 \cdot N_4^2 + N_3^4 + 2 \cdot N_3^2 + 1} = 0$$

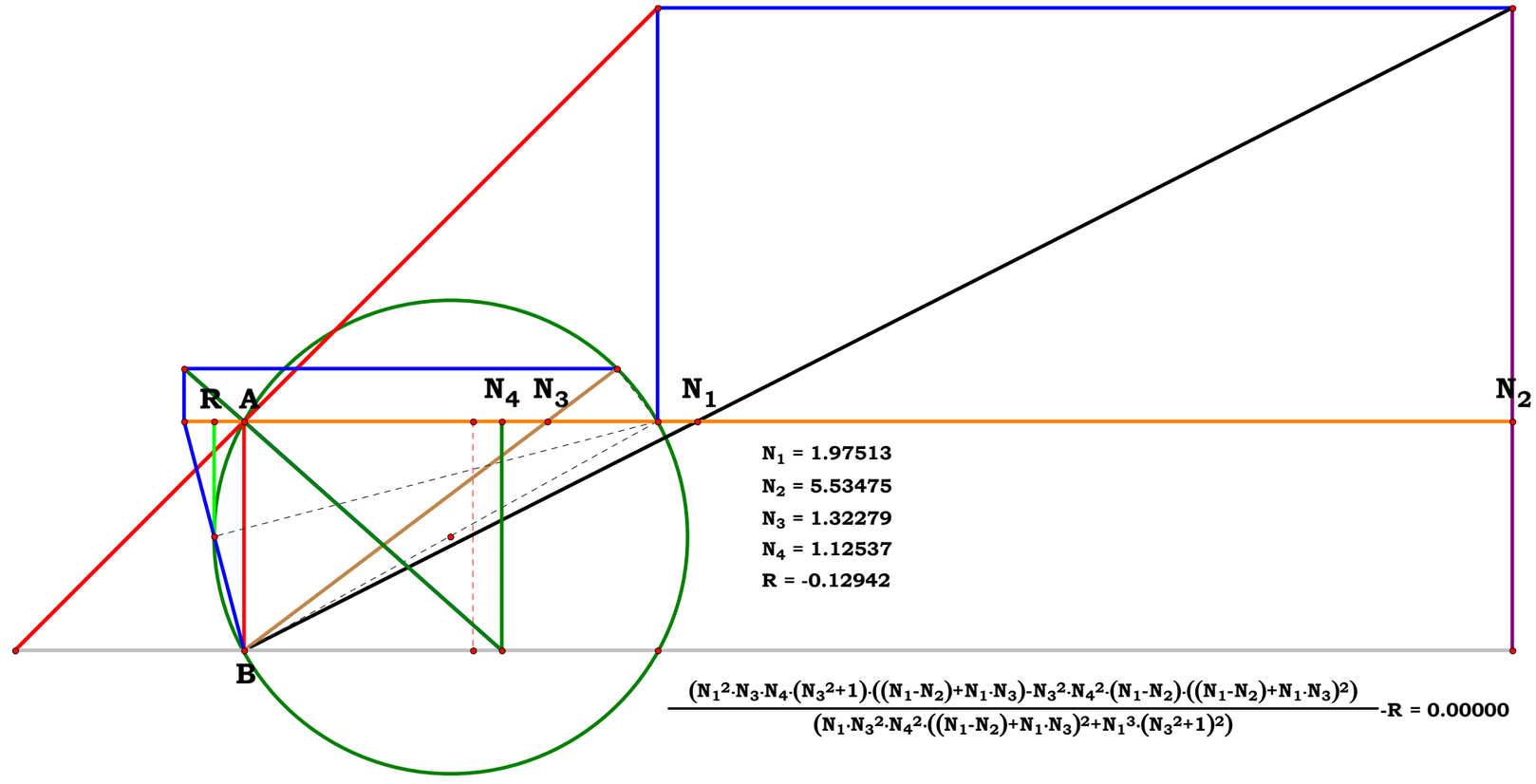
$$R - \frac{N_1^2 \cdot N_3 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2 + N_1 \cdot N_3) - N_3^2 \cdot N_4^2 \cdot (N_1 - N_2) \cdot (N_1 - N_2 + N_1 \cdot N_3)^2}{N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 - N_2 + N_1 \cdot N_3)^2 + N_1^3 \cdot (N_3^2 + 1)^2} = 0$$

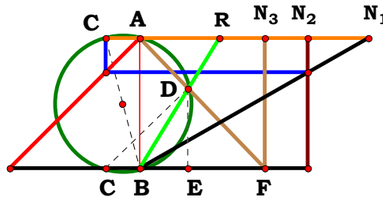
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^2 \cdot (A \cdot C - B \cdot C - B \cdot N_u) \cdot \left[(B^2 - A \cdot B) \cdot N_u^3 + N_u^2 \cdot \left[C \cdot (A^2 + B^2) - B^2 \cdot D - 2 \cdot A \cdot B \cdot C \right] - B^2 \cdot C^2 \cdot D \right]}{B \cdot \left[B^2 \cdot N_u^6 + -2 \cdot N_u^5 \cdot B \cdot C \cdot (A - B) + N_u^4 \cdot (A^2 \cdot C^2 - 2 \cdot A \cdot B \cdot C^2 + B^2 \cdot C^2 + B^2 \cdot D^2) + B^2 \cdot C^2 \cdot D^2 \cdot (C^2 + 2 \cdot N_u^2) \right]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o) \cdot \left[Z \cdot Y \cdot (X \cdot m - W \cdot n) \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o) + W^2 \cdot n^2 \cdot p \cdot \left(Y^2 + o^2 \right) \right]}{n \cdot W \cdot \left[Z^2 \cdot Y^2 \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o)^2 + W^2 \cdot n^2 \cdot p^2 \cdot \left(Y^2 + o^2 \right)^2 \right]} = 0$$





$N_1 = 1.75053$
$N_2 = 1.28562$
$N_3 = 0.96103$
$R = 0.60717$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 1.28562$ $N_3 := .96103$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BC := \frac{N_1 - N_2}{N_1}$ $AF := \sqrt{N_3^2 + AB^2}$

$CF := N_3 + BC$ $DF := \frac{N_3 \cdot CF}{AF}$

$BE := \frac{N_3 \cdot (AF - DF)}{AF}$ $R := \frac{AF \cdot BE}{DF}$

$R = 0.607174$

Definitions.

$$R - \left(\frac{BC^2 + 1}{BC + N_3} - BC \right) = 0$$

$$R - \frac{N_1 - N_1 \cdot N_3 + N_2 \cdot N_3}{N_1 - N_2 + N_1 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

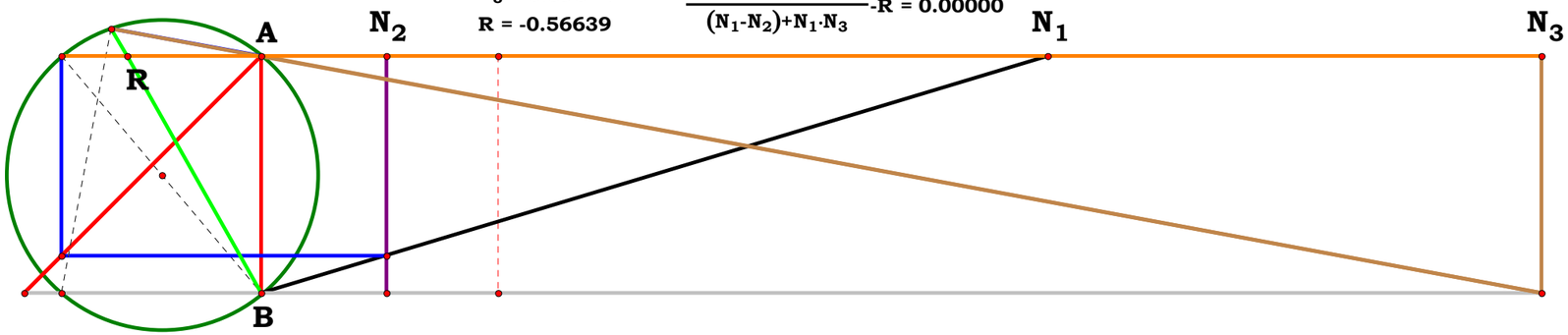
$$R - \frac{B \cdot C + N_u \cdot (A - B)}{C \cdot (B - A) + B \cdot N_u} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

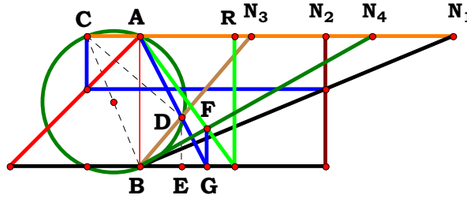
$$R - \frac{Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q}{X \cdot Z \cdot p + X \cdot p \cdot q - Y \cdot o \cdot q} = 0$$

$N_1 = 3.31374$
$N_2 = 0.53067$
$N_3 = 5.39612$
$R = -0.56639$

$\frac{(N_1 - N_1 \cdot N_3) + N_2 \cdot N_3}{(N_1 - N_2) + N_1 \cdot N_3} - R = 0.00000$



4RST1AB1R4



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.85448$
$N_4 = 1.78196$
$R = 0.72686$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .85448$ $N_4 := 1.78196$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$BG := \frac{BE \cdot BN_3}{DN_3}$ $FG := \frac{AB \cdot BG}{N_4}$

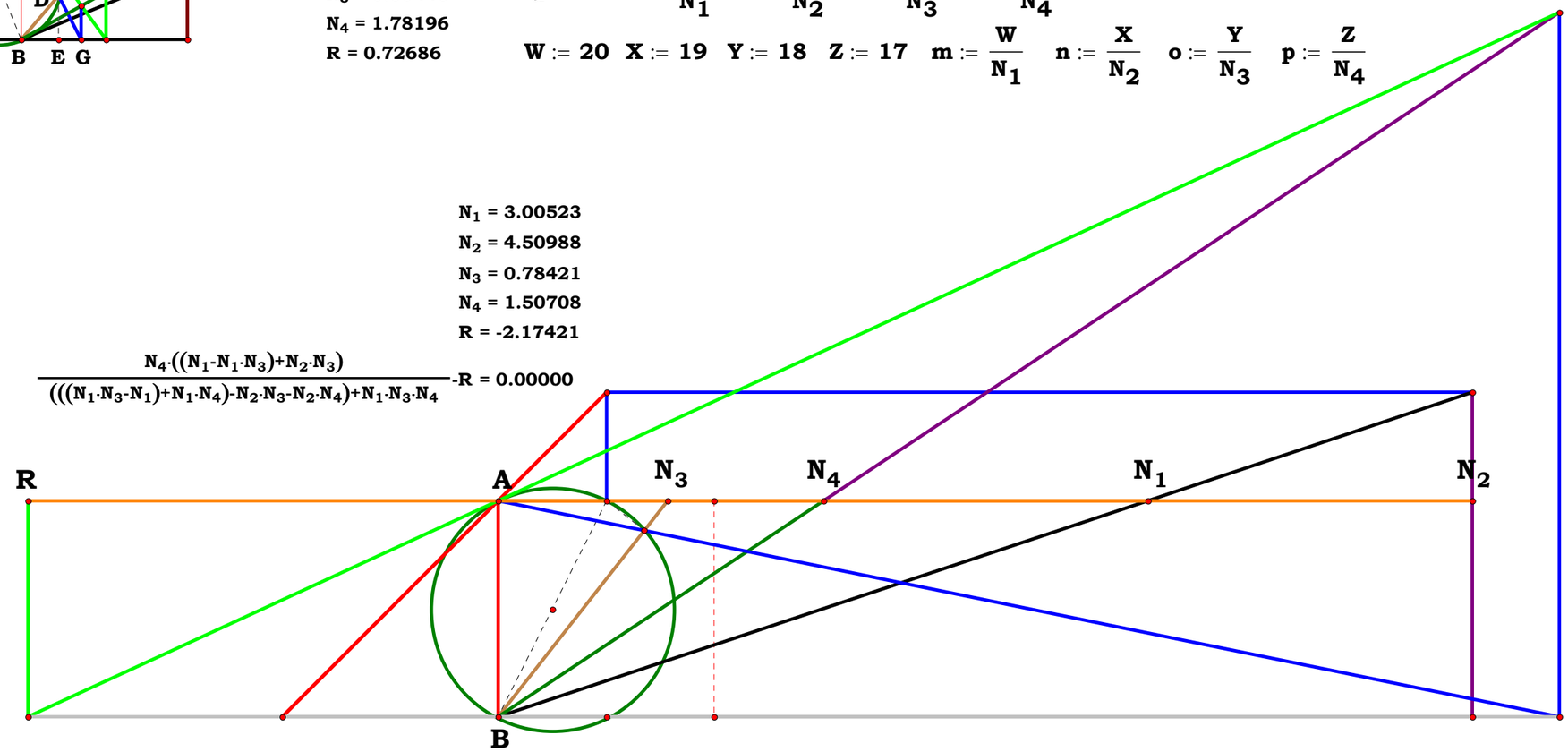
$R := \frac{BG \cdot AB}{AB - FG}$ $R = 0.726866$

Definitions.

$$R - \frac{N_4 - AC \cdot N_3 \cdot N_4}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$N_1 = 3.00523$
$N_2 = 4.50988$
$N_3 = 0.78421$
$N_4 = 1.50708$
$R = -2.17421$

$$\frac{N_4 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)}{(((N_1 \cdot N_3 - N_1) + N_1 \cdot N_4) - N_2 \cdot N_3 - N_2 \cdot N_4) + N_1 \cdot N_3 \cdot N_4} - R = 0.00000$$



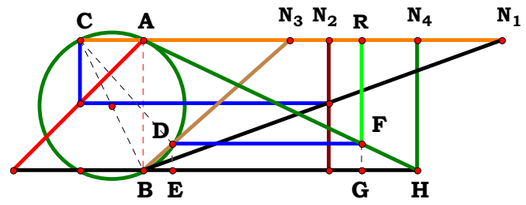
$$R - \frac{N_4 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)}{N_1 \cdot N_3 - N_1 + N_1 \cdot N_4 - N_2 \cdot N_3 - N_2 \cdot N_4 + N_1 \cdot N_3 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [B \cdot C + N_u \cdot (A - B)]}{B \cdot N_u^2 - N_u \cdot (C + D) \cdot (A - B) - B \cdot C \cdot D} = 0$$ $N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot Z \cdot m - W \cdot Y \cdot Z \cdot n + W \cdot Z \cdot n \cdot o}{W \cdot n \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p) - X \cdot m \cdot (Y \cdot p + Z \cdot o)} = 0$$

4RST1AB1R5



$N_1 = 2.74817$
$N_2 = 1.42122$
$N_3 = 1.12569$
$N_4 = 2.10159$
$R = 1.67846$

Unit. $AB := 1$ Given. $N_1 := 2.74817$ $N_2 := 1.42122$ $N_3 := 1.12569$ $N_4 := 2.10159$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$R := N_4 \cdot (AB - DE)$ $R = 1.678466$

Definitions.

$N_3 \cdot N_4 \cdot (AC + N_3)$

$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{N_3^2 + 1} = 0$

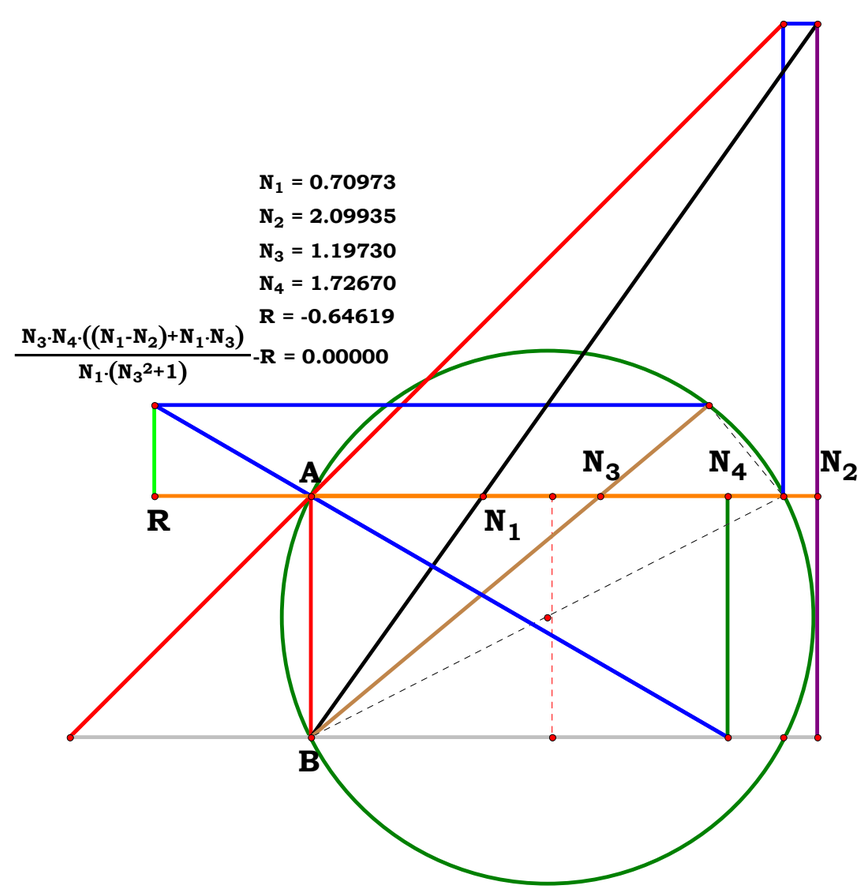
$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_2 + N_1 \cdot N_3)}{N_1 \cdot (N_3^2 + 1)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

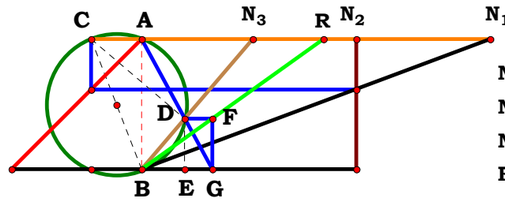
$R - \frac{N_u^2 \cdot [C \cdot (B - A) + B \cdot N_u]}{B \cdot D \cdot (C^2 + N_u^2)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o)}{p \cdot W \cdot n \cdot (Y^2 + o^2)} = 0$



4RST1AB1R6



$N_1 = 2.67068$
$N_2 = 1.64399$
$N_3 = 0.85448$
$R = 1.39650$

Unit. $AB := 1$ **Given.** $N_1 := 2.67068$ $N_2 := 1.64399$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_3 := AC + N_3$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$ $BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$BE := N_3 \cdot DE$ $BG := \frac{BE \cdot AB}{(AB - DE)}$ $R := \frac{BG \cdot AB}{DE}$

$R = 1.396498$

Definitions.

$$R - \frac{N_3^2 + 1}{AC + N_3} = 0$$

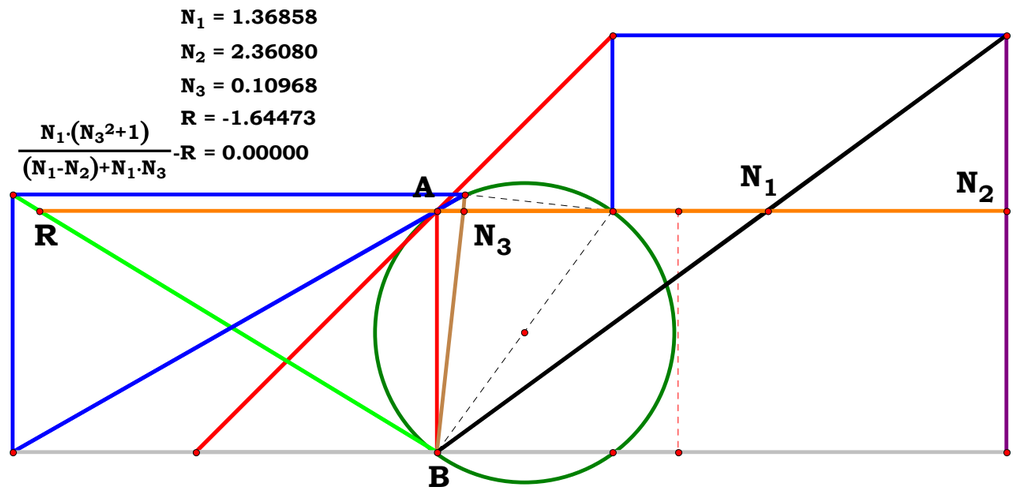
$$R - \frac{N_1 \cdot \left(N_3^2 + 1\right)}{N_1 - N_2 + N_1 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

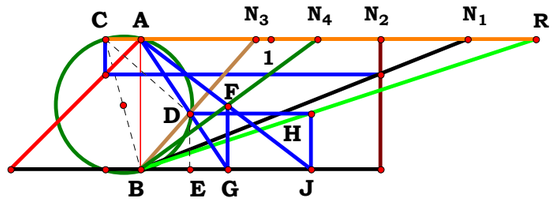
$$R - \frac{B \cdot \left(C^2 + N_u^2\right)}{C \cdot \left[C \cdot (B - A) + B \cdot N_u\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot p \cdot \left(Z^2 + q^2\right)}{q \cdot (X \cdot Z \cdot p + X \cdot p \cdot q - Y \cdot o \cdot q)} = 0$$



4RST1AB1R7



$N_1 = 2.50603$
$N_2 = 1.83771$
$N_3 = 0.88354$
$N_4 = 1.35578$
$R = 3.03637$

Unit. $AB := 1$ **Given.** $N_1 := 2.50603$ $N_2 := 1.83771$ $N_3 := .88354$ $N_4 := 1.35578$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

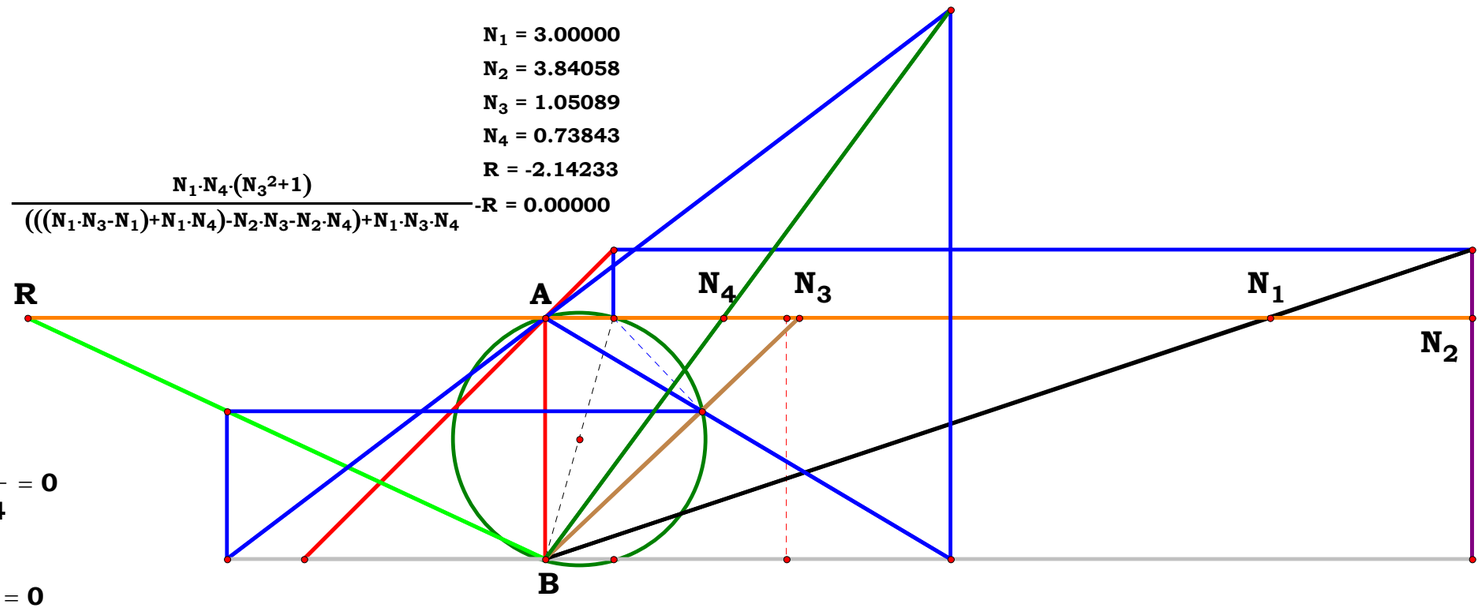
$DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$DE := \frac{AB \cdot BD}{BN_3}$ $BG := \frac{BE \cdot AB}{AB - DE}$ $FG := \frac{AB \cdot BG}{N_4}$

$BJ := \frac{BG}{AB - FG}$ $R := \frac{BJ \cdot AB}{DE}$ $R = 3.03638$

$\frac{N_1 \cdot N_4 \cdot (N_3^2+1)}{(((N_1 \cdot N_3 - N_1) + N_1 \cdot N_4) - N_2 \cdot N_3 - N_2 \cdot N_4) + N_1 \cdot N_3 \cdot N_4}$ $-R = 0.00000$

$N_1 = 3.00000$
$N_2 = 3.84058$
$N_3 = 1.05089$
$N_4 = 0.73843$
$R = -2.14233$



Definitions.

$$R - \frac{N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 - N_1 + N_1 \cdot N_4 - N_2 \cdot N_3 - N_2 \cdot N_4 + N_1 \cdot N_3 \cdot N_4} = 0$$

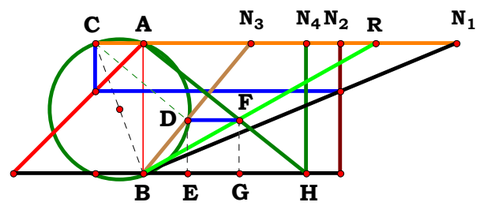
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{C \cdot [B \cdot N_u^2 + N_u \cdot (C + D) \cdot (B - A) - B \cdot C \cdot D]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot (Y^2 + o^2)}{o \cdot (W \cdot Y \cdot Z \cdot n + W \cdot Y \cdot n \cdot p + W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p - X \cdot Z \cdot m \cdot o - W \cdot n \cdot o \cdot p)} = 0$$

4RST1AB1R8



$N_1 = 2.39948$
$N_2 = 1.50839$
$N_3 = 0.82543$
$N_4 = 1.24924$
$R = 1.77959$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.50839$ $N_3 := .82543$ $N_4 := 1.24924$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad BG := N_4 \cdot (AB - DE)$$

$$R := \frac{BG \cdot AB}{DE} \qquad R = 1.779608$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{(1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_2 + N_1 \cdot N_3)}{N_1 - N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

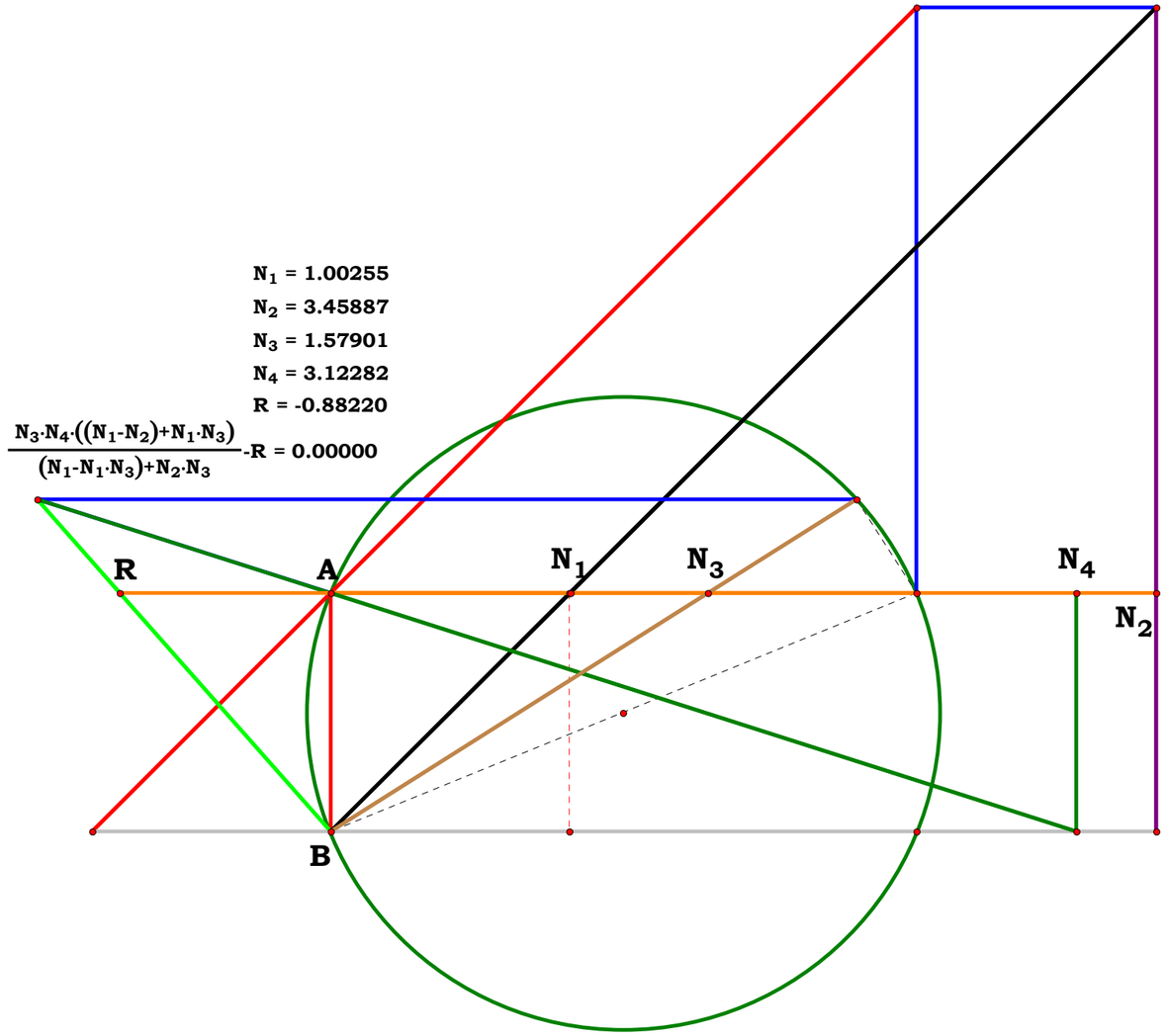
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [C \cdot (B - A) + B \cdot N_u]}{D \cdot [B \cdot C^2 + C \cdot N_u \cdot (A - B)]} = 0$$

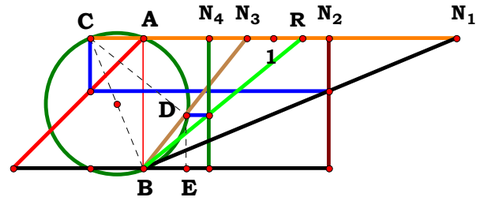
$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o)}{o \cdot p \cdot (X \cdot Y \cdot m - W \cdot Y \cdot n + W \cdot n \cdot o)} = 0$$

$N_1 = 1.00255$
$N_2 = 3.45887$
$N_3 = 1.57901$
$N_4 = 3.12282$
$R = -0.88220$
$\frac{N_3 \cdot N_4 \cdot ((N_1 - N_2) + N_1 \cdot N_3)}{(N_1 - N_1 \cdot N_3) + N_2 \cdot N_3} - R = 0.00000$



4RST1AB1R9



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.79637$
$N_4 = 0.50343$
$R = 1.21825$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .79637$ $N_4 := .50343$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad R := \frac{N_4}{DE}$$

$R = 1.218244$

Definitions.

$$R - \frac{-N_4 \cdot (N_3^{\,2} + 1)}{AC \cdot N_3 - 1} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot (N_3^{\,2} + 1)}{N_1 - N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

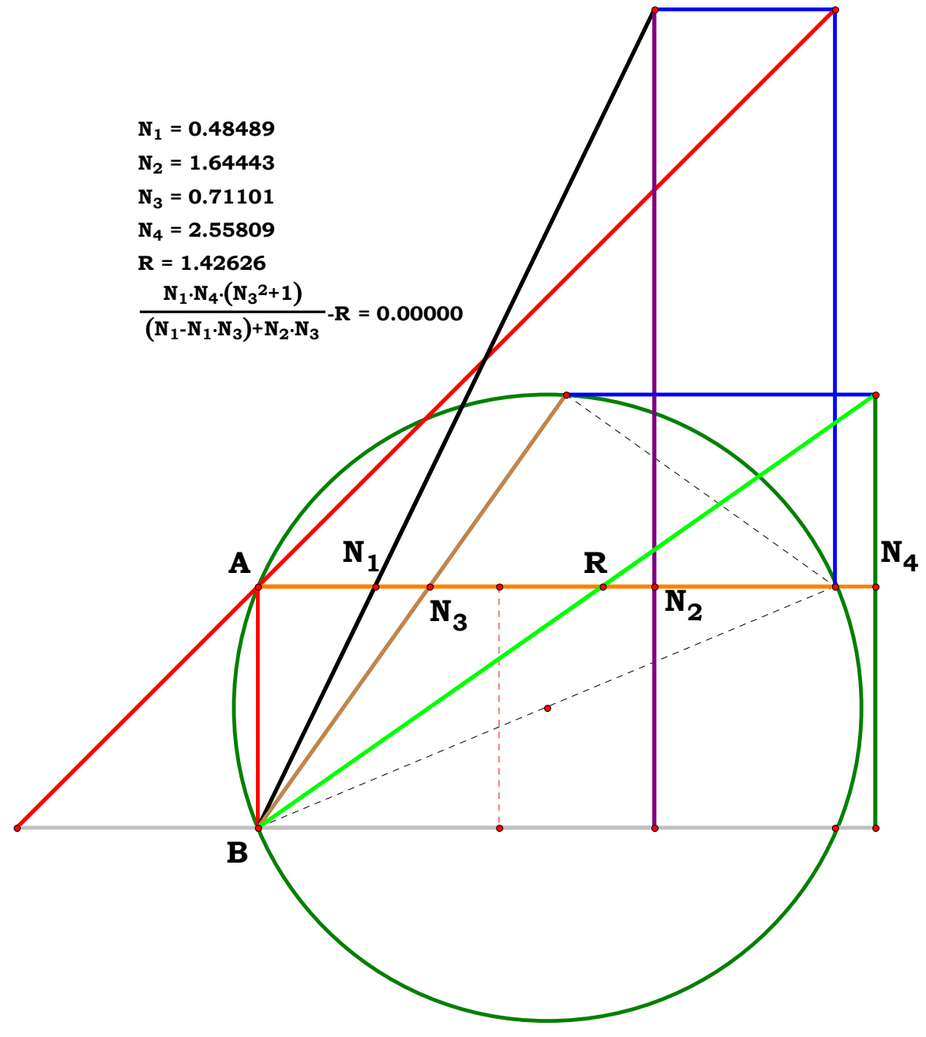
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^{\,2})}{D \cdot [B \cdot C^2 + C \cdot N_u \cdot (A - B)]} = 0$$

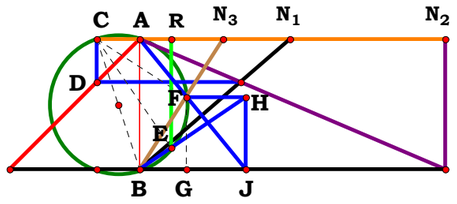
$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Z \cdot n \cdot (Y^2 + o^2)}{o \cdot p \cdot (X \cdot Y \cdot m - W \cdot Y \cdot n + W \cdot n \cdot o)} = 0$$

$N_1 = 0.48489$
$N_2 = 1.64443$
$N_3 = 0.71101$
$N_4 = 2.55809$
$R = 1.42626$
$\frac{N_1 \cdot N_4 \cdot (N_3^{\,2}+1)}{(N_1 - N_1 \cdot N_3) + N_2 \cdot N_3} - R = 0.00000$



4RST1AB3R0



$N_1 = 1.15002$
$N_2 = 2.34137$
$N_3 = 0.64140$
$R = 0.24332$

Unit. $AB := 1$ Given. $N_1 := 1.15002$ $N_2 := 2.34137$ $N_3 := .64140$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

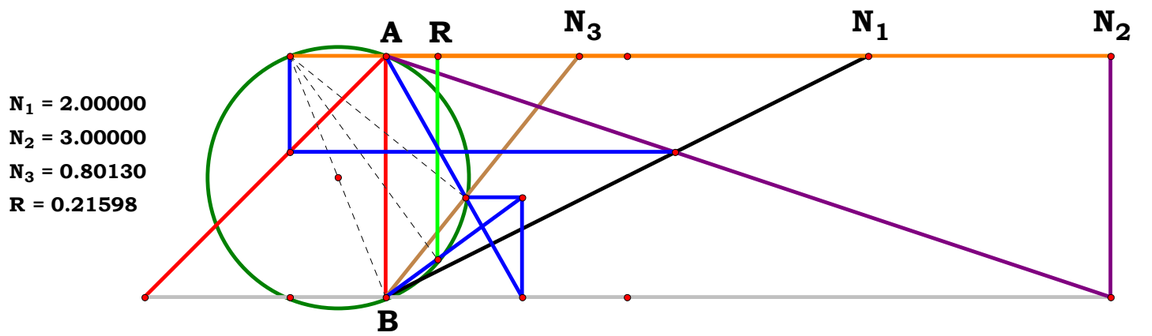
$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$FN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BF := BN_3 - FN_3$ $FG := \frac{AB \cdot BF}{BN_3}$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $GJ := \frac{BG \cdot BF}{FN_3}$ $BJ := BG + GJ$

$HJ := FG$ $AK := \frac{BJ \cdot AB}{HJ}$ $BK := \sqrt{AK^2 + AB^2}$ $CK := AK + AC$

$EK := \frac{AK \cdot CK}{BK}$ $BE := BK - EK$ $R := \frac{AK \cdot BE}{BK}$ $R = 0.24332$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.80130$
$R = 0.21598$

$$\frac{(N_3 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot ((N_1+N_2)-N_1 \cdot N_3))}{(N_1^2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+2)+2 \cdot N_1^2+2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+1)+2 \cdot N_1 \cdot N_2+N_2^2 \cdot N_3^2 \cdot (N_3^2+3)+N_2^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_3^2+1) \cdot (1 - AC \cdot N_3)}{AC^2 + 2 \cdot AC \cdot N_3 + N_3^4 + 3 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot (N_1+N_2-N_1 \cdot N_3)}{N_1^2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+2) + 2 \cdot N_1^2 + 2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+1) + 2 \cdot N_1 \cdot N_2 + N_2^2 \cdot N_3^2 \cdot (N_3^2+3) + N_2^2} = 0$$

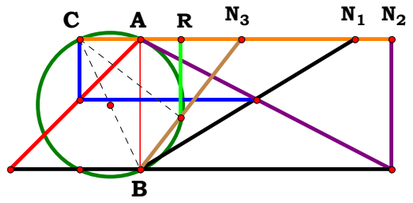
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot (C^2+N_u^2) \cdot (A+B) \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{N_u^2 \cdot (3 \cdot C^2+N_u^2) \cdot (A+B)^2 + 2 \cdot N_u \cdot B \cdot C^3 \cdot (A+B) + C^4 \cdot (A^2+2 \cdot A \cdot B+2 \cdot B^2)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Z \cdot (X \cdot p + Y \cdot o) \cdot (Z^2+q^2) \cdot (X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q)}{Z^4 \cdot (X \cdot p + Y \cdot o)^2 + 3 \cdot Z^2 \cdot q^2 \cdot (X \cdot p + Y \cdot o)^2 + 2 \cdot Z \cdot X \cdot p \cdot q^3 \cdot (X \cdot p + Y \cdot o) + q^4 \cdot (2 \cdot X^2 \cdot p^2 + 2 \cdot X \cdot Y \cdot o \cdot p + Y^2 \cdot o^2)} = 0$$

4RST1AB3R1



$N_1 = 1.64399$
$N_2 = 1.92488$
$N_3 = 0.77700$
$R = 0.31108$

Unit. $AB := 1$ **Given.** $N_1 := 1.64399$ $N_2 := 1.92488$ $N_3 := .77700$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $R := \frac{N_3 \cdot BD}{BN_3}$

$R = 0.311084$

Definitions.

$$R - \frac{N_3 \cdot (1 - AC \cdot N_3)}{N_3^2 + 1} = 0$$

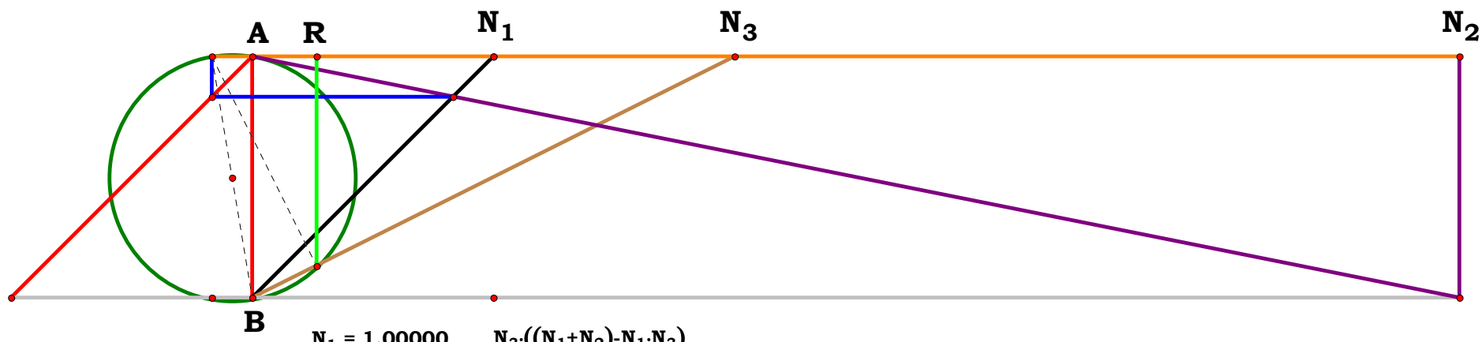
$$R - \frac{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot [C \cdot (A + B) - B \cdot N_u]}{(C^2 + N_u^2) \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

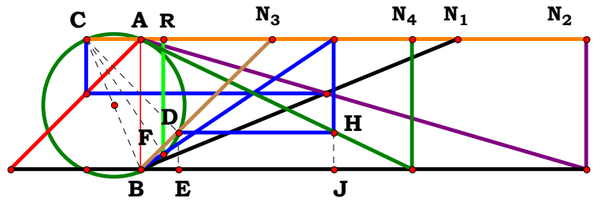
$$R - \frac{Z \cdot (X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q)}{(X \cdot p + Y \cdot o) \cdot (Z^2 + q^2)} = 0$$



$N_1 = 1.00000$
$N_2 = 5.00000$
$N_3 = 2.00000$
$R = 0.26667$

$\frac{N_3 \cdot ((N_1 + N_2) - N_1 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$

4RST1AB3R2



$N_1 = 2.42854$
$N_2 = 3.41649$
$N_3 = 1.00946$
$N_4 = 2.08221$
$R = 0.17781$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 3.41649$ $N_3 := 1.00946$ $N_4 := 2.08221$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

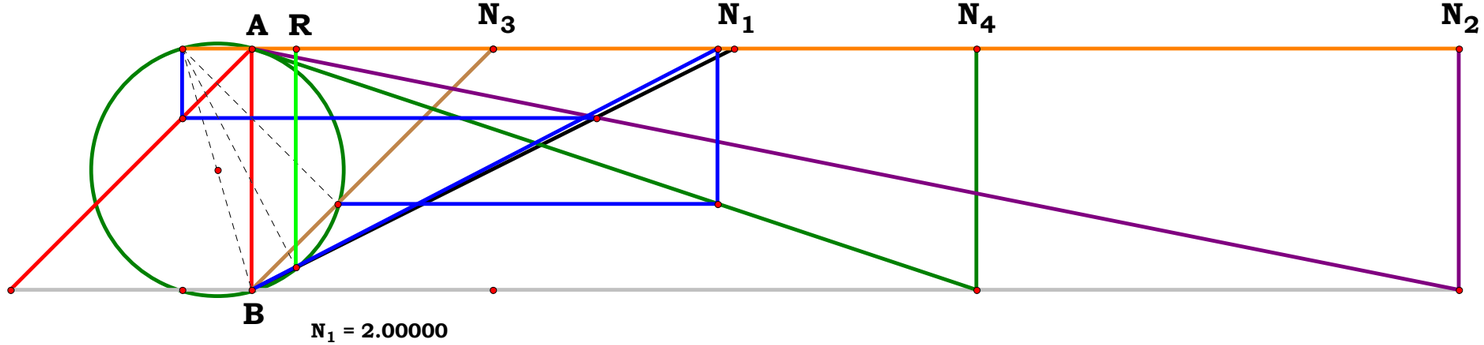
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := AB \cdot \left(\frac{BN_3 - EN_3}{BN_3} \right)$ $AG := N_4 \cdot (AB - EF)$

$BG := \sqrt{AG^2 + AB^2}$ $CG := AG + AC$

$FG := \frac{AG \cdot CG}{BG}$ $R := AG \cdot \left(\frac{BG - FG}{BG} \right)$

$R = 0.177813$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$R = 0.18347$
$\frac{(N_3 \cdot N_4 \cdot (N_1+N_2)^2 \cdot (N_3^2+1) \cdot (N_1+N_1 \cdot N_3+N_2 \cdot N_3) - N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1+N_1 \cdot N_3+N_2 \cdot N_3)^2)}{((N_1+N_2) \cdot (N_3^2 \cdot N_4^2 \cdot (N_1+N_1 \cdot N_3+N_2 \cdot N_3)^2 + (N_3^2+1)^2 \cdot (N_1+N_2)^2))} - R = 0.00000$

Definitions.

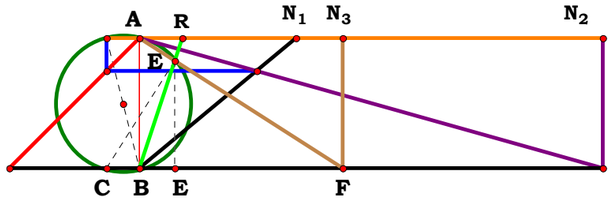
$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3) \cdot (N_3^2 - AC \cdot N_3^2 \cdot N_4 - AC^2 \cdot N_3 \cdot N_4 + 1)}{AC^2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot AC \cdot N_3^3 \cdot N_4^2 + N_3^4 \cdot N_4^2 + N_3^4 + 2 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)^2}{(N_1 + N_2) \cdot \left[N_3^2 \cdot N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)^2 + (N_3^2 + 1)^2 \cdot (N_1 + N_2)^2 \right]} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)] \cdot \left[D \cdot (C^2 + N_u^2) \cdot (A + B)^2 - [B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u + B \cdot N_u)] \right]}{(A + B) \cdot \left[D^2 \cdot (C^2 + N_u^2)^2 \cdot (A + B)^2 + N_u^4 \cdot (B \cdot C + A \cdot N_u + B \cdot N_u)^2 \right]} = 0 \qquad N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)^2}{(N_1 + N_2) \cdot \left[N_3^2 \cdot N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)^2 + (N_3^2 + 1)^2 \cdot (N_1 + N_2)^2 \right]} = 0$$

4RST1AB3R3



$N_1 = 1.19844$
$N_2 = 3.55209$
$N_3 = 1.56155$
$R = 0.33413$

Unit. $AB := 1$ Given. $N_1 := 1.19844$ $N_2 := 3.55209$ $N_3 := 1.56155$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

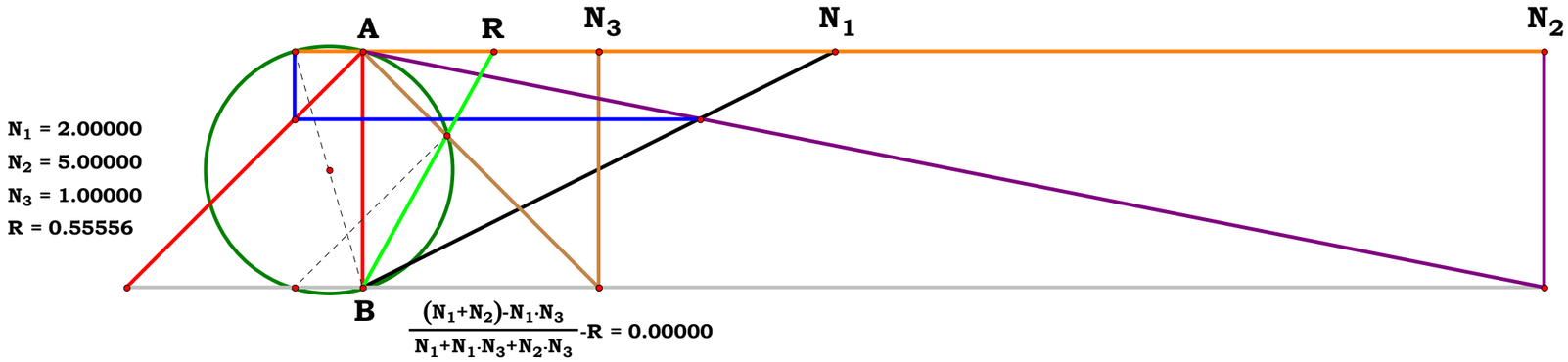
Descriptions.

$$BC := \left(\frac{N_1}{N_1 + N_2}\right) \quad AF := \sqrt{N_3^2 + AB^2}$$

$$CF := N_3 + BC \quad DF := \frac{N_3 \cdot CF}{AF}$$

$$BE := \frac{N_3 \cdot (AF - DF)}{AF} \quad R := \frac{AF \cdot BE}{DF}$$

$R = 0.334134$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 1.00000$
$R = 0.55556$

$$\frac{(N_1+N_2)-N_1 \cdot N_3}{N_1+N_1 \cdot N_3+N_2 \cdot N_3} - R = 0.00000$$

Definitions.

$$R - \left(\frac{BC^2 + 1}{BC + N_3} - BC\right) = 0$$

$$R - \frac{N_1 + N_2 - N_1 \cdot N_3}{N_1 + N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

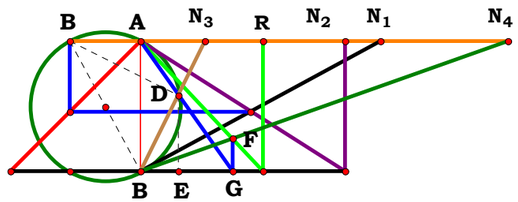
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C \cdot (A + B) - B \cdot N_u}{B \cdot C + N_u \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q}{X \cdot Z \cdot p + Y \cdot Z \cdot o + X \cdot p \cdot q} = 0$$

4RST1AB3R4



$N_1 = 1.83771$
$N_2 = 1.56650$
$N_3 = 0.49611$
$N_4 = 2.81833$
$R = 0.94335$

Unit. $AB := 1$ Given. $N_1 := 1.83771$ $N_2 := 1.56650$ $N_3 := .49611$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

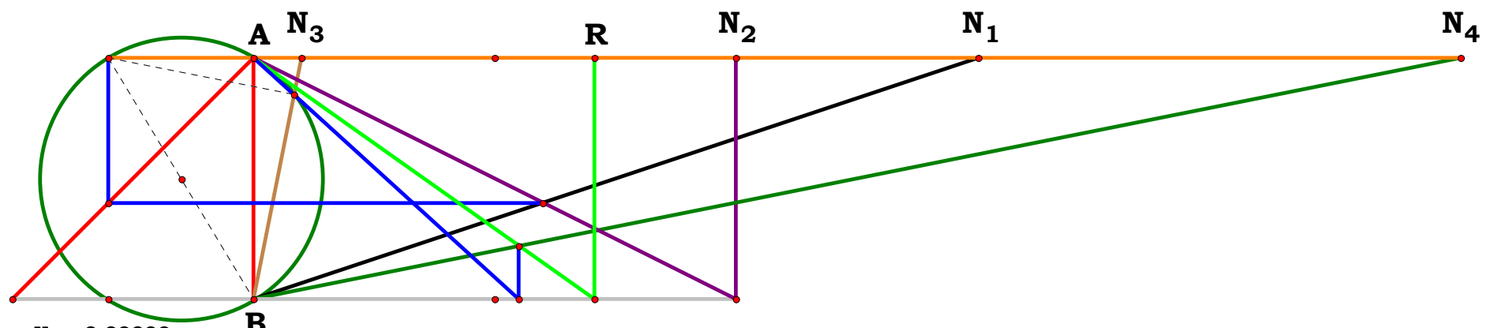
$AC := \frac{N_1}{N_1 + N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$BG := \frac{BE \cdot BN_3}{DN_3}$ $FG := \frac{AB \cdot BG}{N_4}$

$R := \frac{BG \cdot AB}{AB - FG}$ $R = 0.94335$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.20000$
$N_4 = 5.00000$
$R = 1.41026$

$$\frac{N_4 \cdot ((N_1+N_2)-N_1 \cdot N_3)}{(N_1 \cdot N_3 - N_2 - N_1)+N_1 \cdot N_4+N_1 \cdot N_3 \cdot N_4+N_2 \cdot N_3 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 - AC \cdot N_3 \cdot N_4}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_4 \cdot (N_1 + N_2 - N_1 \cdot N_3)}{N_1 \cdot N_3 - N_2 - N_1 + N_1 \cdot N_4 + N_1 \cdot N_3 \cdot N_4 + N_2 \cdot N_3 \cdot N_4} = 0$$

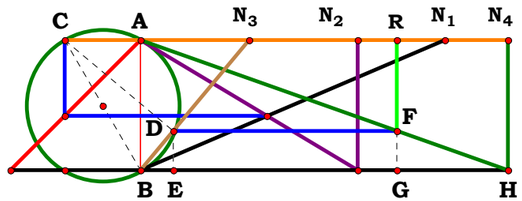
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{(A + B) \cdot N_u^2 + N_u \cdot B \cdot (C + D) - [C \cdot D \cdot (A + B)]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{A \cdot X \cdot Z \cdot o - N_u \cdot Y \cdot Z \cdot n + N_u \cdot Z \cdot n \cdot o}{A \cdot X \cdot (Y \cdot Z - o \cdot p) + N_u \cdot n \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p)} = 0$$

4RST1AB3R5



$N_1 = 2.33168$
$N_2 = 1.66336$
$N_3 = 0.83511$
$N_4 = 2.81833$
$R = 1.96724$

Unit. $AB := 1$ Given. $N_1 := 2.33168$ $N_2 := 1.66336$ $N_3 := .83511$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

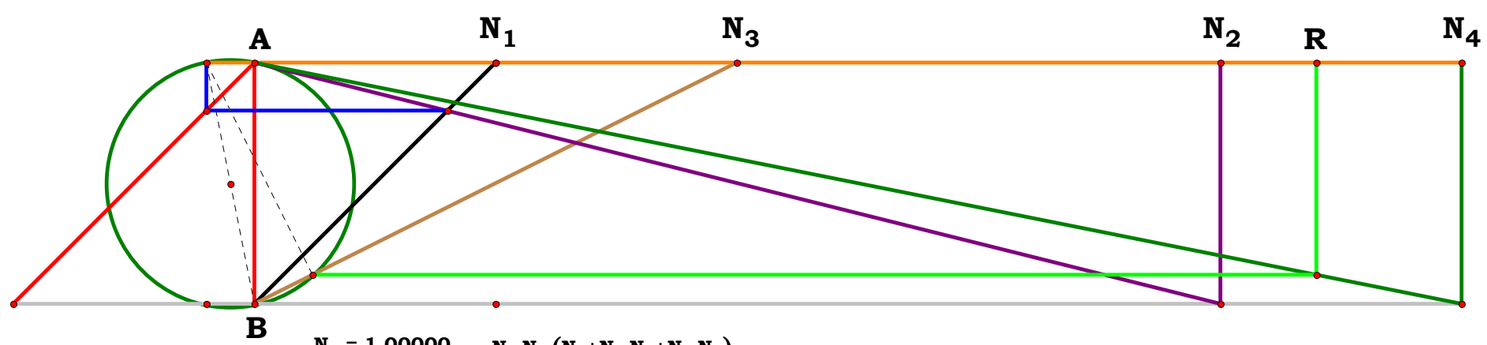
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_3 := AC + N_3$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$$

$$BD := BN_3 - DN_3 \qquad DE := \frac{AB \cdot BD}{BN_3}$$

$$R := N_4 \cdot (AB - DE) \qquad R = 1.967234$$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 5.00000$
$R = 4.40000$

$$\frac{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} = 0$$

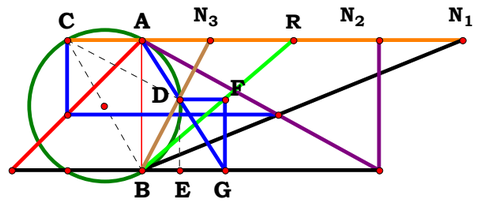
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)]}{D \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + W \cdot n \cdot o)}{p \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2)} = 0$$

4RST1AB3R6



$N_1 = 2.45760$
$N_2 = 1.81833$
$N_3 = 0.52517$
$R = 1.15990$

Unit. $AB := 1$ Given. $N_1 := 2.45760$ $N_2 := 1.81833$ $N_3 := .52517$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

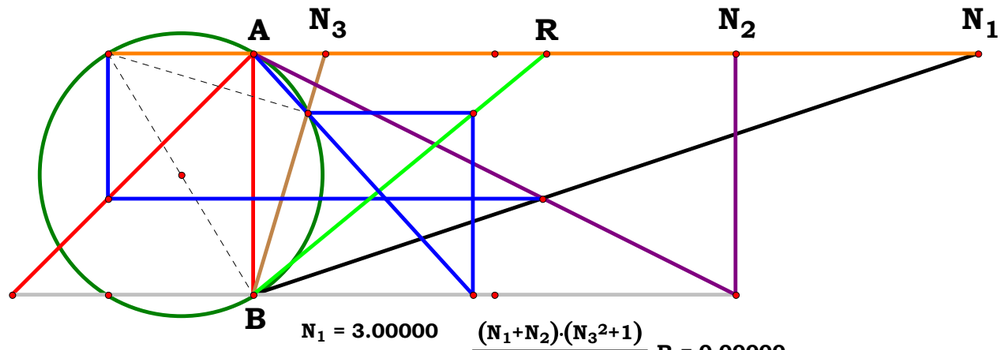
$AC := \frac{N_1}{N_1 + N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$BE := N_3 \cdot DE$ $BG := \frac{BE \cdot AB}{(AB - DE)}$

$R := \frac{BG \cdot AB}{DE}$ $R = 1.159903$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.30000$
$R = 1.21111$

$\frac{(N_1+N_2)\cdot(N_3^2+1)}{N_1+N_1\cdot N_3+N_2\cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_3^2 + 1}{AC + N_3} = 0$

$R - \frac{(N_1 + N_2) \cdot (N_3^2 + 1)}{N_1 + N_1 \cdot N_3 + N_2 \cdot N_3} = 0$

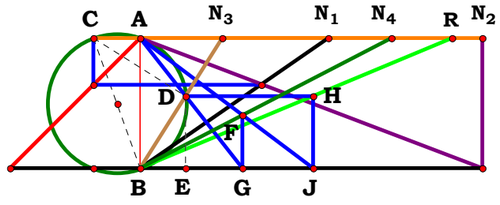
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{(C^2 + N_u^2) \cdot (A + B)}{C \cdot [B \cdot C + N_u \cdot (A + B)]} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{(X \cdot p + Y \cdot o) \cdot (Z^2 + q^2)}{X \cdot p \cdot q^2 + X \cdot Z \cdot p \cdot q + Y \cdot Z \cdot o \cdot q} = 0$

4RST1AB3R7



$N_1 = 1.44059$
$N_2 = 2.62225$
$N_3 = 0.63171$
$N_4 = 1.92724$
$R = 2.39715$

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := 2.62225$ $N_3 := .63171$ $N_4 := 1.92724$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

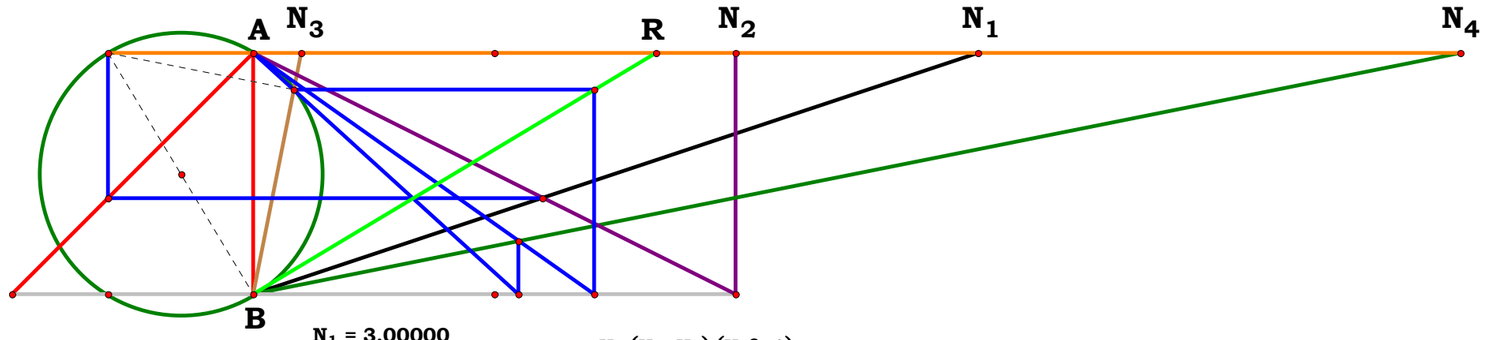
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$DE := \frac{AB \cdot BD}{BN_3}$ $BG := \frac{BE \cdot AB}{AB - DE}$ $FG := \frac{AB \cdot BG}{N_4}$

$BJ := \frac{BG}{AB - FG}$ $R := \frac{BJ \cdot AB}{DE}$ $R = 2.397151$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.20000$
$N_4 = 5.00000$
$R = 1.66667$

$$\frac{N_4 \cdot (N_1+N_2) \cdot (N_3^2+1)}{(N_1 \cdot (N_3+N_4) - N_1 - N_2) + N_3 \cdot N_4 \cdot (N_1+N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot \left(N_3^2 + 1\right)}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_4 \cdot (N_1 + N_2) \cdot \left(N_3^2 + 1\right)}{N_1 \cdot (N_3 + N_4) - N_1 - N_2 + N_3 \cdot N_4 \cdot (N_1 + N_2)} = 0$$

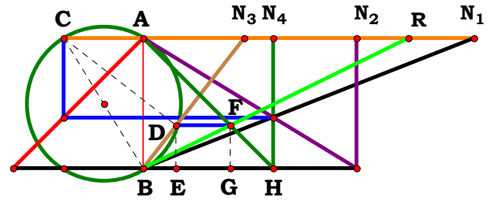
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B)}{C \cdot \left(N_u^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot B \cdot C \cdot (C + D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (W \cdot n + X \cdot m) \cdot \left(Y^2 + o^2\right)}{o \cdot [W \cdot n \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p) + X \cdot m \cdot (Y \cdot Z - o \cdot p)]} = 0$$

4RST1AB3R8



$N_1 = 2.53508$
$N_2 = 1.63430$
$N_3 = 0.77700$
$N_4 = 0.99741$
$R = 2.03456$

Unit. $AB := 1$ Given. $N_1 := 2.53508$ $N_2 := 1.63430$ $N_3 := .77700$ $N_4 := .99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

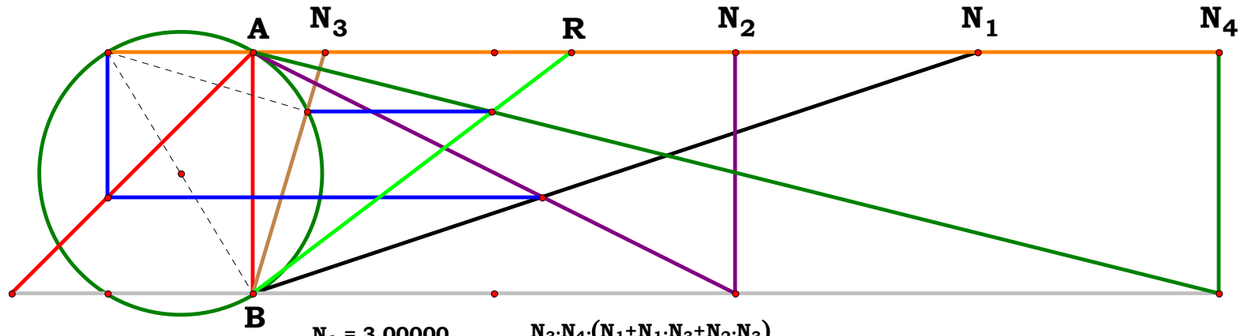
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad BG := N_4 \cdot (AB - DE)$$

$$R := \frac{BG \cdot AB}{DE} \qquad R = 2.034581$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.30000$
$N_4 = 4.00000$
$R = 1.31707$

$\frac{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) - N_1 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{(1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{N_1 + N_2 - N_1 \cdot N_3} = 0$$

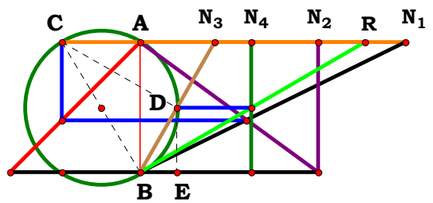
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^{\,2} \cdot [B \cdot C + N_u \cdot (A + B)]}{C \cdot D \cdot [C \cdot (A + B) - B \cdot N_u]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + W \cdot n \cdot o)}{o \cdot p \cdot (W \cdot n \cdot o - W \cdot Y \cdot n + X \cdot m \cdot o)} = 0$$

4RST1AB3R9



$N_1 = 2.03142$
$N_2 = 1.36310$
$N_3 = 0.57360$
$N_4 = 0.85212$
$R = 1.72440$

Unit. $AB := 1$ Given. $N_1 := 2.03142$ $N_2 := 1.36310$ $N_3 := .57360$ $N_4 := .85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad R := \frac{N_4}{DE}$$

$R = 1.724414$

Definitions.

$$R - \frac{-N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 - 1} = 0$$

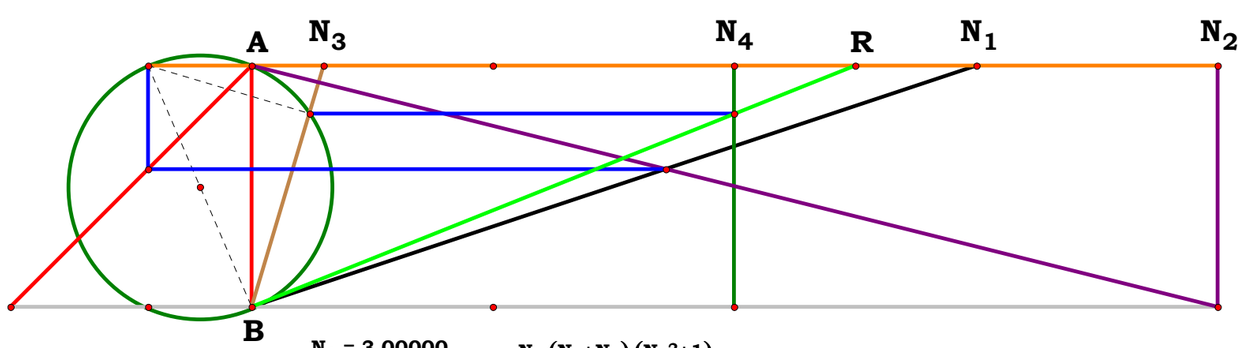
$$R - \frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_1 + N_2 - N_1 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{C \cdot D \cdot [C \cdot (A + B) - B \cdot N_u]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

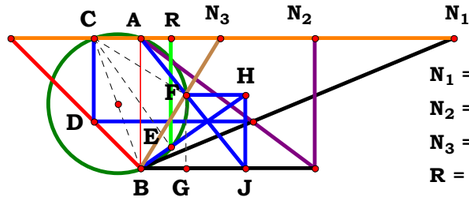
$$R - \frac{Z \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2)}{o \cdot p \cdot (W \cdot n \cdot o - W \cdot Y \cdot n + X \cdot m \cdot o)} = 0$$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.30000$
$N_4 = 2.00000$
$R = 2.50164$

$$\frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_1 + N_2) - N_1 \cdot N_3} - R = 0.00000$$

4RST1AB4R0



$N_1 = 2.39948$
$N_2 = 1.33405$
$N_3 = 0.61234$
$R = 0.23235$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.33405$ $N_3 := .61234$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$FN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BF := BN_3 - FN_3$ $FG := \frac{AB \cdot BF}{BN_3}$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $GJ := \frac{BG \cdot BF}{FN_3}$

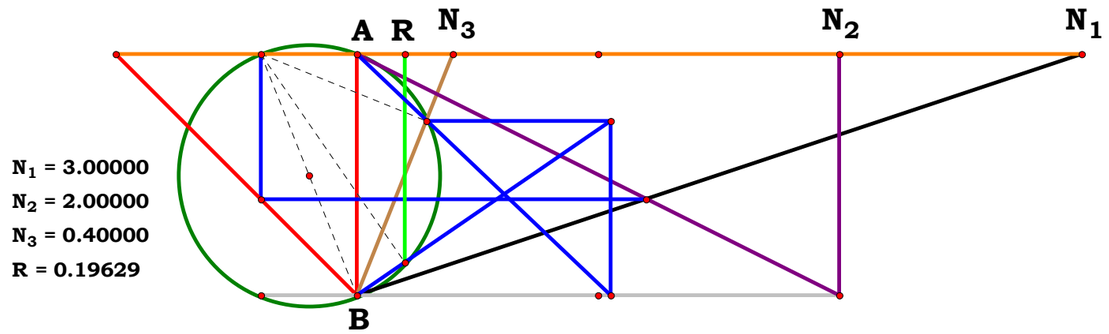
$BJ := BG + GJ$ $HJ := FG$

$AK := \frac{BJ \cdot AB}{HJ}$ $BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$ $EK := \frac{AK \cdot CK}{BK}$

$BE := BK - EK$ $R := \frac{AK \cdot BE}{BK}$

$R = 0.232351$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.40000$
$R = 0.19629$

$$\frac{(N_3 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot ((N_1+N_2) - N_2 \cdot N_3))}{(N_1^2 \cdot N_3^2 \cdot (N_3^2+3) + N_1^2 + 2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+1) + 2 \cdot N_1 \cdot N_2 + N_2^2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+2) + 2 \cdot N_2^2)} - R = 0.00000$$

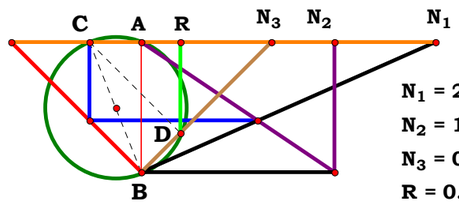
Definitions.

$$R - \frac{N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(1 - AC \cdot N_3\right)}{AC^2 + 2 \cdot AC \cdot N_3 + N_3^4 + 3 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot \left(N_1 + N_2\right) \cdot \left(N_3^2 + 1\right) \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right)}{N_1^2 \cdot N_3^2 \cdot \left(N_3^2 + 3\right) + N_1^2 + 2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot \left(N_3^3 + 3 \cdot N_3 + 1\right) + 2 \cdot N_1 \cdot N_2 + N_2^2 \cdot N_3 \cdot \left(N_3^3 + 3 \cdot N_3 + 2\right) + 2 \cdot N_2^2} = 0$$

$$R - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B) \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right) \cdot (A + B)^2 + 2 \cdot N_u \cdot A \cdot C^3 \cdot (A + B) + C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right)} = 0$$

4RST1AB4R1



$N_1 = 2.25419$
$N_2 = 1.47933$
$N_3 = 0.99977$
$R = 0.30193$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.47933$ $N_3 := .99977$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $R := \frac{N_3 \cdot BD}{BN_3}$

$R = 0.301931$

Definitions.

$$R - \frac{N_3 \cdot (1 - AC \cdot N_3)}{N_3^2 + 1} = 0$$

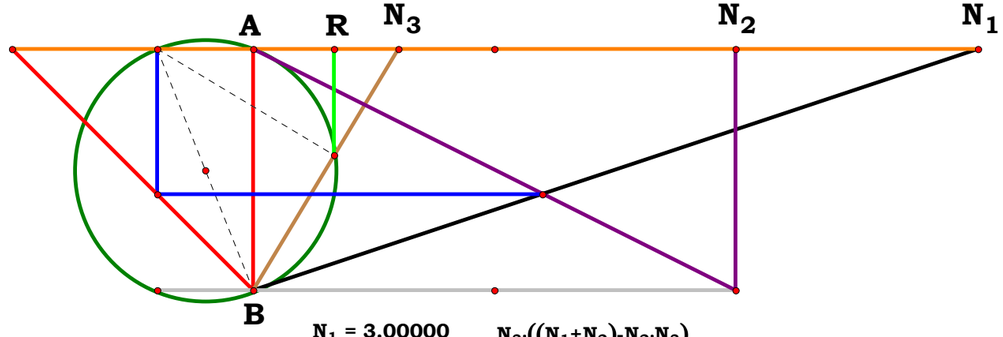
$$R - \frac{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot [C \cdot (A + B) - A \cdot N_u]}{(C^2 + N_u^2) \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

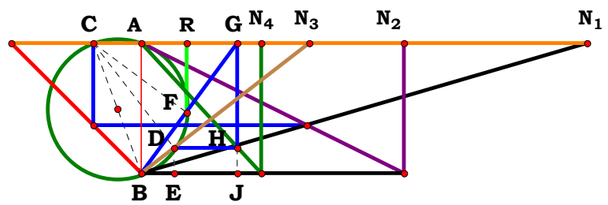
$$R - \frac{Z \cdot (X \cdot p \cdot q - Y \cdot Z \cdot o + Y \cdot o \cdot q)}{(X \cdot p + Y \cdot o) \cdot (Z^2 + q^2)} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$R = 0.33529$

$$\frac{N_3 \cdot ((N_1 + N_2) - N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$$

4RST1AB4R2



$N_1 = 3.41649$
$N_2 = 2.01205$
$N_3 = 1.29034$
$N_4 = 0.91992$
$R = 0.34702$

Unit. $AB := 1$ Given. $N_1 := 3.41649$ $N_2 := 2.01205$ $N_3 := 1.29034$ $N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

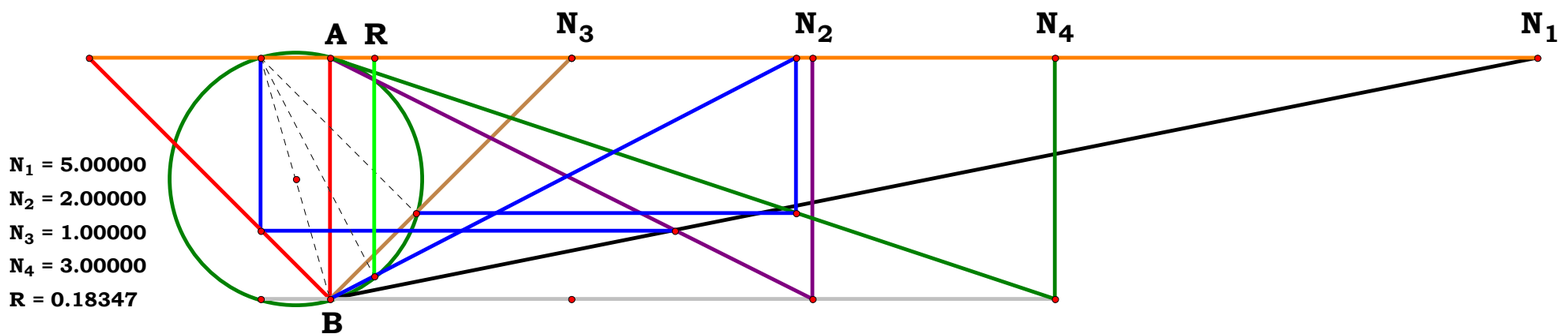
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := AB \cdot \left(\frac{BN_3 - EN_3}{BN_3} \right)$ $AG := N_4 \cdot (AB - EF)$

$BG := \sqrt{AG^2 + AB^2}$ $CG := AG + AC$

$FG := \frac{AG \cdot CG}{BG}$ $R := AG \cdot \left(\frac{BG - FG}{BG} \right)$

$R = 0.347019$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$R = 0.18347$

$$\frac{(N_3 \cdot N_4 \cdot (N_1+N_2)^2 \cdot (N_3^2+1) \cdot (N_2+N_1 \cdot N_3+N_2 \cdot N_3) - N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_2+N_1 \cdot N_3+N_2 \cdot N_3)^2)}{((N_1+N_2) \cdot (N_3^2 \cdot N_4^2 \cdot (N_2+N_1 \cdot N_3+N_2 \cdot N_3)^2 + (N_3^2+1)^2 \cdot (N_1+N_2)^2))} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3) \cdot (N_3^2 - AC \cdot N_3^2 \cdot N_4 - AC^2 \cdot N_3 \cdot N_4 + 1)}{AC^2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot AC \cdot N_3^3 \cdot N_4^2 + N_3^4 \cdot N_4^2 + N_3^4 + 2 \cdot N_3^2 + 1} = 0$$

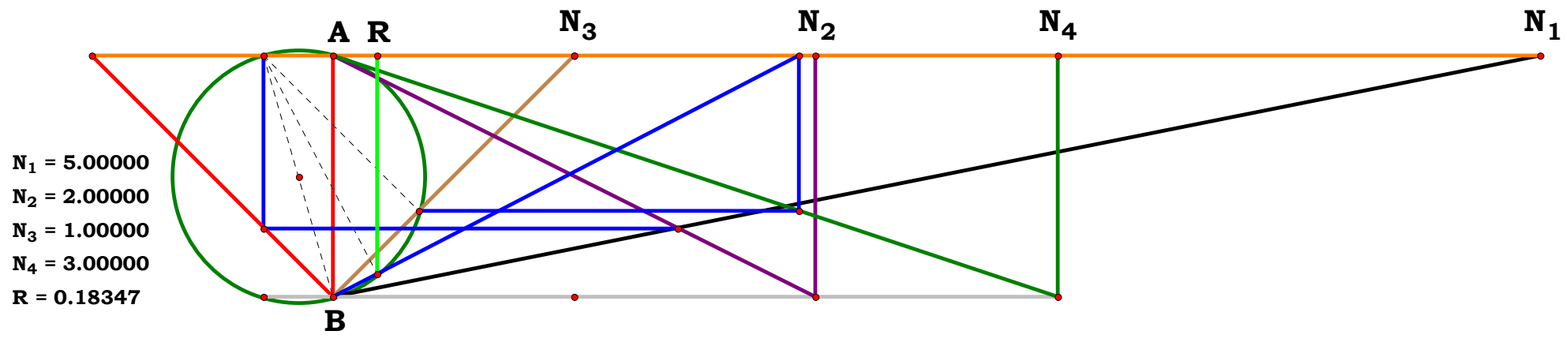
$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3) - N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)^2}{(N_1 + N_2) \cdot \left[N_3^2 \cdot N_4^2 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)^2 + (N_3^2 + 1)^2 \cdot (N_1 + N_2)^2 \right]} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A + B)] \cdot [D \cdot (C^2 + N_u^2) \cdot (A + B)^2 - [A \cdot N_u^2 \cdot (A \cdot C + A \cdot N_u + B \cdot N_u)]]}{\left[D^2 \cdot (C^2 + N_u^2)^2 \cdot (A + B)^2 + N_u^4 \cdot (A \cdot C + A \cdot N_u + B \cdot N_u)^2 \right] \cdot (A + B)} = 0$$

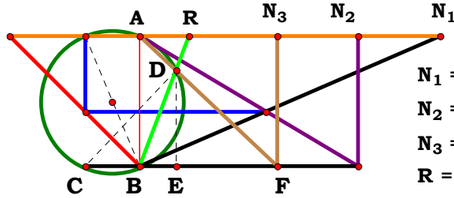
$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + X \cdot m \cdot o) \cdot \left[p \cdot \left(Y^2 + o^2\right) \cdot (W \cdot n + X \cdot m)^2 - Z \cdot X \cdot Y \cdot m \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + X \cdot m \cdot o)\right]}{(W \cdot n + X \cdot m) \cdot \left[Z^2 \cdot Y^2 \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + X \cdot m \cdot o)^2 + p^2 \cdot \left(Y^2 + o^2\right)^2 \cdot (W \cdot n + X \cdot m)^2\right]} = 0$$



$$\frac{(N_3 \cdot N_4 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3) - N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)^2)}{((N_1 + N_2) \cdot (N_3^2 \cdot N_4^2 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)^2 + (N_3^2 + 1)^2 \cdot (N_1 + N_2)^2))} - R = 0.00000$$

4RST1AB4R3



$N_1 = 2.30262$
$N_2 = 1.67305$
$N_3 = 1.05789$
$R = 0.37521$

Unit. $AB := 1$ **Given.** $N_1 := 2.30262$ $N_2 := 1.67305$ $N_3 := 1.05789$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BC := \frac{N_2}{N_1 + N_2}$ $AF := \sqrt{N_3^2 + AB^2}$

$CF := N_3 + BC$ $DF := \frac{N_3 \cdot CF}{AF}$

$BE := \frac{N_3 \cdot (AF - DF)}{AF}$ $R := \frac{AF \cdot BE}{DF}$

$R = 0.375202$

Definitions.

$$R - \left(\frac{BC^2 + 1}{BC + N_3} - BC \right) = 0$$

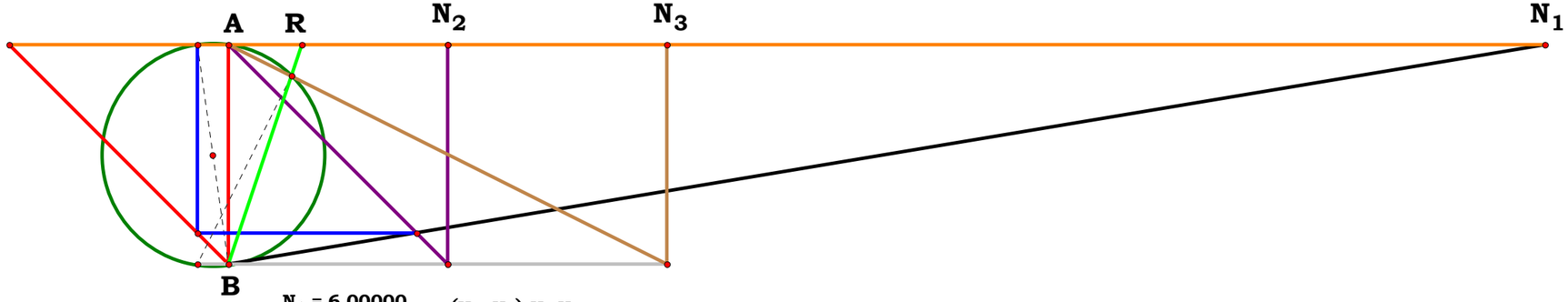
$$R - \frac{N_1 + N_2 - N_2 \cdot N_3}{N_2 + N_1 \cdot N_3 + N_2 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C \cdot (A + B) - A \cdot N_u}{A \cdot C + N_u \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot p \cdot q - Y \cdot Z \cdot o + Y \cdot o \cdot q}{X \cdot Z \cdot p + Y \cdot Z \cdot o + Y \cdot o \cdot q} = 0$$

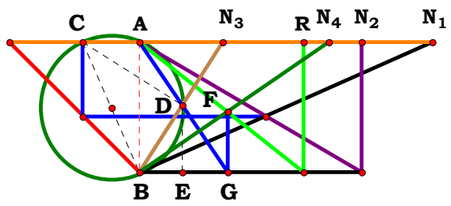


$N_1 = 6.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$

$\frac{(N_1+N_2)-N_2 \cdot N_3}{N_2+N_1 \cdot N_3+N_2 \cdot N_3} - R = 0.00000$

$R = 0.33333$

4RST1AB4R4



$N_1 = 2.24451$
$N_2 = 1.70210$
$N_3 = 0.64140$
$N_4 = 1.45264$
$R = 1.25869$

Unit. $AB := 1$ Given. $N_1 := 2.24451$ $N_2 := 1.70210$ $N_3 := .64140$ $N_4 := 1.45264$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

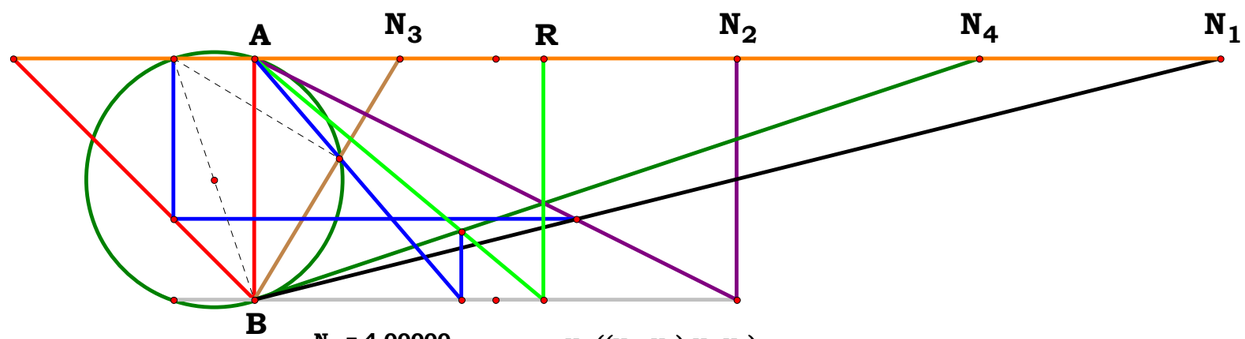
$AC := \frac{N_2}{N_1 + N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$BG := \frac{BE \cdot BN_3}{DN_3}$ $FG := \frac{AB \cdot BG}{N_4}$

$R := \frac{BG \cdot AB}{AB - FG}$ $R = 1.258684$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$N_4 = 3.00000$
$R = 1.20000$

$\frac{N_4 \cdot ((N_1+N_2)-N_2 \cdot N_3)}{(N_2 \cdot (N_3+N_4)-N_1-N_2)+N_3 \cdot N_4 \cdot (N_1+N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 - AC \cdot N_3 \cdot N_4}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_4 \cdot (N_1 + N_2 - N_2 \cdot N_3)}{N_2 \cdot (N_3 + N_4) - N_1 - N_2 + N_3 \cdot N_4 \cdot (N_1 + N_2)} = 0$$

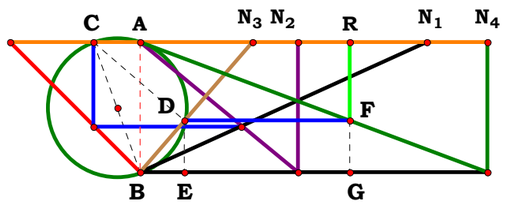
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [C \cdot (A + B) - A \cdot N_u]}{(N_u^2 - C \cdot D) \cdot (A + B) + N_u \cdot A \cdot (C + D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot o - X \cdot Y \cdot Z \cdot m + X \cdot Z \cdot m \cdot o}{X \cdot m \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p) + W \cdot (Y \cdot Z \cdot n - n \cdot o \cdot p)} = 0$$

4RST1AB4R5



$N_1 = 2.19608$
$N_2 = 1.20813$
$N_3 = 0.86417$
$N_4 = 2.66336$
$R = 1.60626$

Unit. $AB := 1$ Given. $N_1 := 2.19608$ $N_2 := 1.20813$ $N_3 := .86417$ $N_4 := 2.66336$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

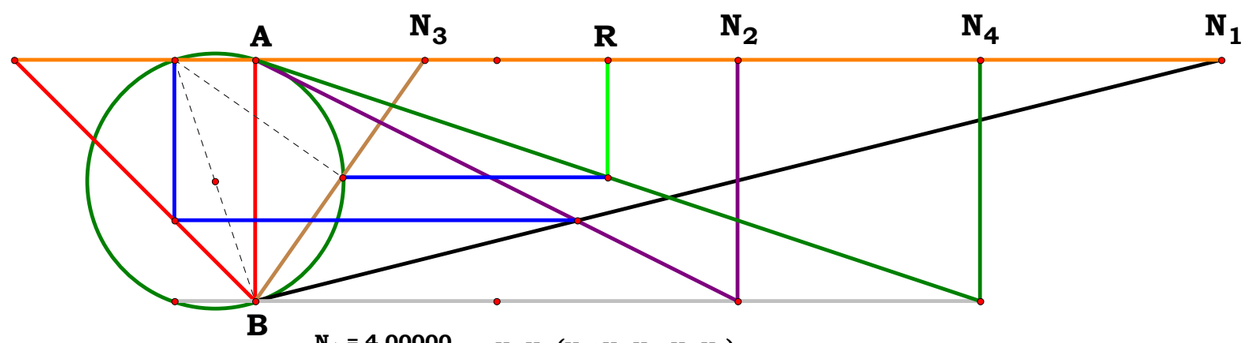
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$R := N_4 \cdot (AB - DE)$ $R = 1.606255$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 3.00000$
$\frac{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$
$R = 1.45638$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) \cdot (N_3^2 + 1)} = 0$$

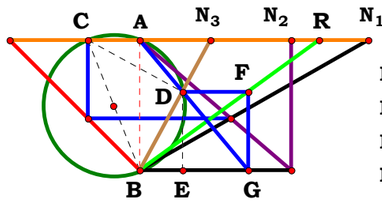
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A + B)]}{D \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + X \cdot m \cdot o)}{p \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2)} = 0$$

4RST1AB4R6



$N_1 = 1.75053$
$N_2 = 1.15970$
$N_3 = 0.54454$
$R = 1.37485$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 1.15970$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

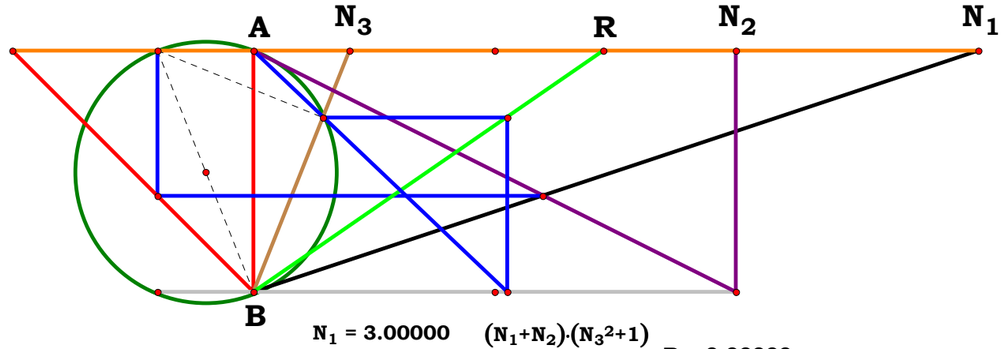
$AC := \frac{N_2}{N_1 + N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$BE := N_3 \cdot DE$ $BG := \frac{BE \cdot AB}{(AB - DE)}$

$R := \frac{BG \cdot AB}{DE}$ $R = 1.374848$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.40000$
$R = 1.45000$

$\frac{(N_1+N_2)\cdot(N_3^2+1)}{N_2+N_1\cdot N_3+N_2\cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_3^2 + 1}{AC + N_3} = 0$

$R - \frac{(N_1 + N_2) \cdot (N_3^2 + 1)}{N_2 + N_1 \cdot N_3 + N_2 \cdot N_3} = 0$

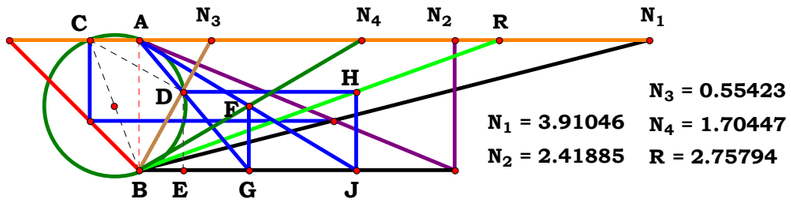
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{(C^2 + N_u^2) \cdot (A + B)}{C \cdot [A \cdot C + N_u \cdot (A + B)]} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{(X \cdot p + Y \cdot o) \cdot (Z^2 + q^2)}{Y \cdot o \cdot q^2 + X \cdot Z \cdot p \cdot q + Y \cdot Z \cdot o \cdot q} = 0$

4RST1AB4R7



$N_3 = 0.55423$
$N_1 = 3.91046$ $N_4 = 1.70447$
$N_2 = 2.41885$ $R = 2.75794$

Unit. $AB := 1$ **Given.** $N_1 := 3.91046$ $N_2 := 2.41885$ $N_3 := .55423$

$N_4 := 1.70447$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

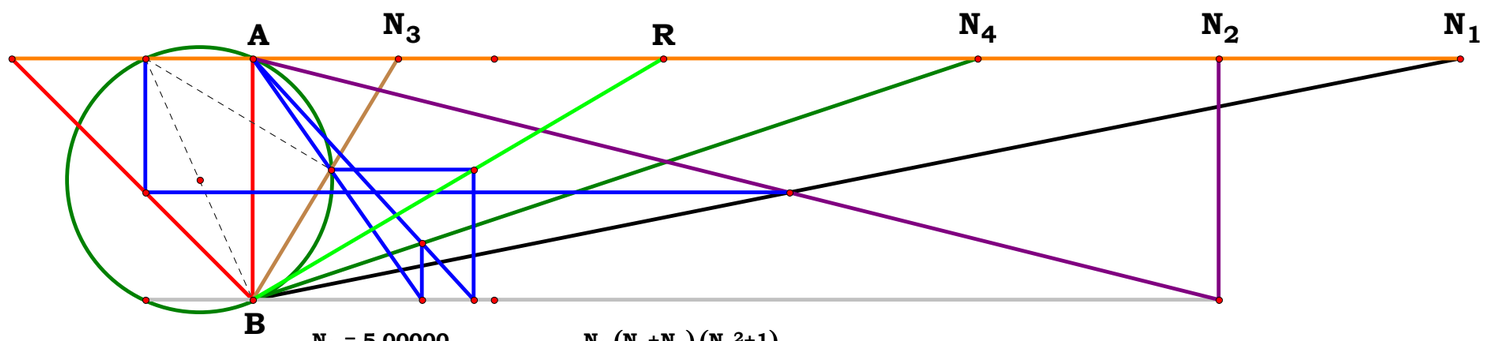
$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$DE := \frac{AB \cdot BD}{BN_3}$ $BG := \frac{BE \cdot AB}{AB - DE}$

$FG := \frac{AB \cdot BG}{N_4}$ $BJ := \frac{BG}{AB - FG}$

$R := \frac{BJ \cdot AB}{DE}$ $R = 2.757919$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 0.60000$
$N_4 = 3.00000$
$R = 1.70000$

$\frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_2 \cdot (N_3 + N_4) - (N_1 + N_2)) + N_3 \cdot N_4 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

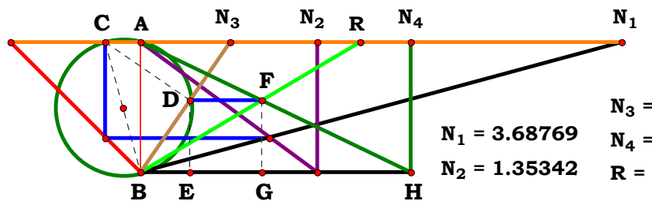
$R - \frac{N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$

$R - \frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_2 \cdot (N_3 + N_4) - N_1 - N_2 + N_3 \cdot N_4 \cdot (N_1 + N_2)} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{C \cdot (N_u^2 - C \cdot D) \cdot (A + B) + N_u \cdot A \cdot C \cdot (C + D)} = 0$ $N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Z \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2)}{o \cdot [W \cdot n \cdot (Y \cdot Z - o \cdot p) + X \cdot m \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p)]} = 0$

4RST1AB4R8



$N_1 = 3.68769$
$N_2 = 1.35342$
$N_3 = 0.68983$
$N_4 = 2.07253$
$R = 1.68148$

Unit. $AB := 1$ Given. $N_1 := 3.68769$ $N_2 := 1.35342$ $N_3 := .68983$ $N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

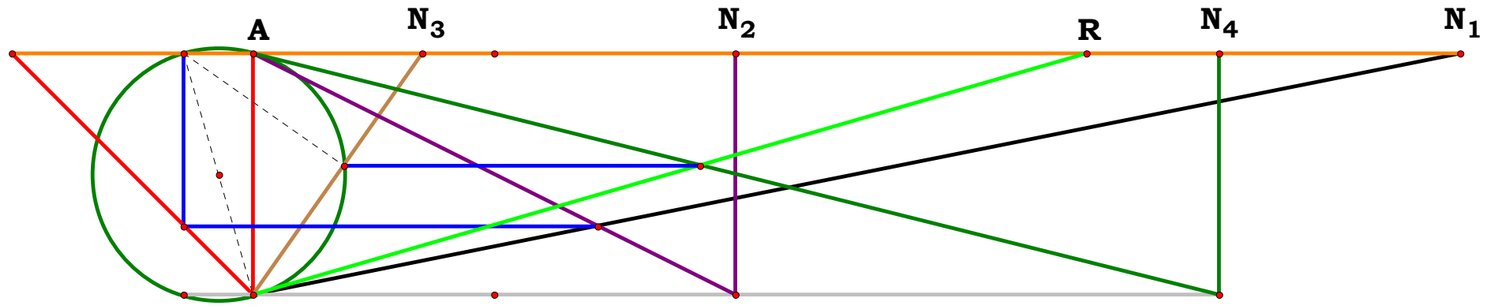
Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad BG := N_4 \cdot (AB - DE)$$

$$R := \frac{BG \cdot AB}{DE} \qquad R = 1.681505$$



Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{(1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}{N_1 + N_2 - N_2 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^{\,2} \cdot [A \cdot C + N_u \cdot (A + B)]}{C \cdot D \cdot [A \cdot C + (B \cdot C - A \cdot N_u)]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

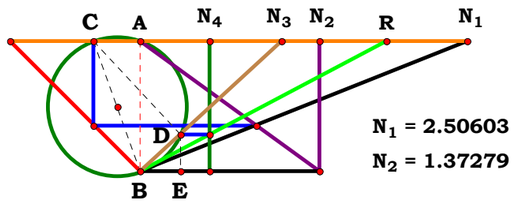
$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot n + X \cdot Y \cdot m + X \cdot m \cdot o)}{o \cdot p \cdot (W \cdot n \cdot o - X \cdot Y \cdot m + X \cdot m \cdot o)} = 0$$

B

$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 4.00000$
$R = 3.45000$

$$\frac{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}{(N_1 + N_2) - N_2 \cdot N_3} - R = 0.00000$$

4RST1AB4R9



$N_1 = 2.50603$
$N_2 = 1.37279$
$N_3 = 1.08694$
$N_4 = 0.53249$
$R = 1.88783$

Unit. $AB := 1$ Given. $N_1 := 2.50603$ $N_2 := 1.37279$ $N_3 := 1.08694$ $N_4 := .53249$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3}$ $R := \frac{N_4}{DE}$

$R = 1.887817$

Definitions.

$R - \frac{-N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 - 1} = 0$

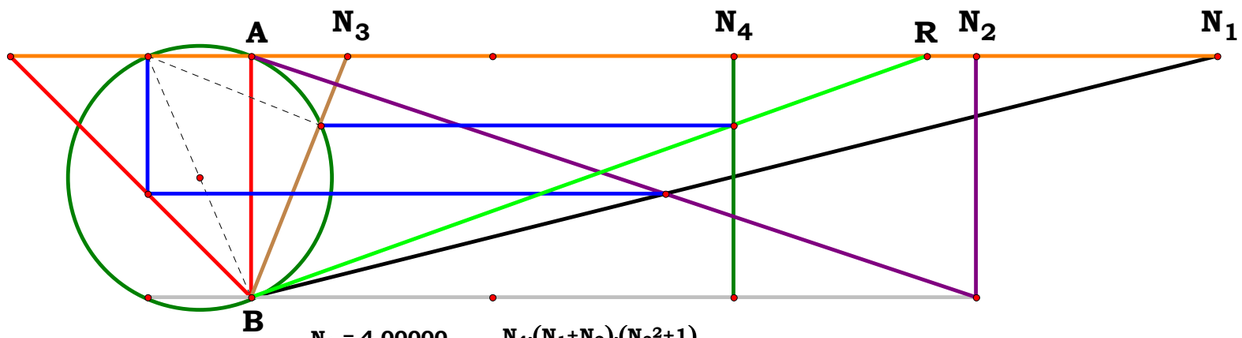
$R - \frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_1 + N_2 - N_2 \cdot N_3} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{C \cdot D \cdot [C \cdot (A + B) - A \cdot N_u]} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

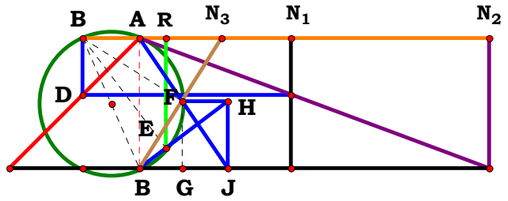
$R - \frac{Z \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2)}{o \cdot p \cdot (W \cdot n \cdot o - X \cdot Y \cdot m + X \cdot m \cdot o)} = 0$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 0.40000$
$N_4 = 2.00000$
$R = 2.80000$

$\frac{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_1 + N_2) - N_2 \cdot N_3} - R = 0.00000$

4RST1AB5R0



$N_1 = 1.15970$
$N_2 = 2.68037$
$N_3 = 0.63171$
$R = 0.20783$

Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 2.68037$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

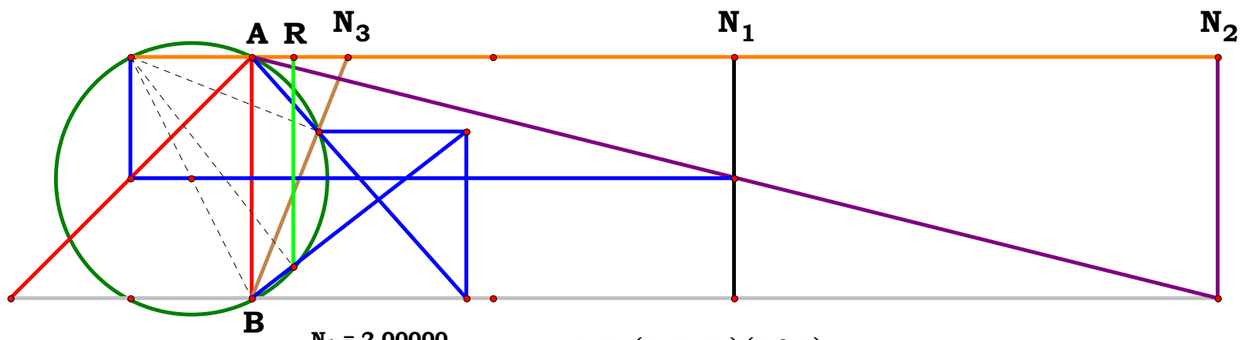
$FN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BF := BN_3 - FN_3$ $FG := \frac{AB \cdot BF}{BN_3}$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $GJ := \frac{BG \cdot BF}{FN_3}$ $BJ := BG + GJ$

$HJ := FG$ $AK := \frac{BJ \cdot AB}{HJ}$ $BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$ $EK := \frac{AK \cdot CK}{BK}$ $BE := BK - EK$

$R := \frac{AK \cdot BE}{BK}$ $R = 0.207828$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 0.40000$
$R = 0.17320$

$$\frac{N_2 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_3^2+1)}{N_1^2+N_2 \cdot N_3 \cdot (N_2 \cdot N_3^3+3 \cdot N_2 \cdot N_3+2 \cdot N_1)+N_2^2} - R = 0.00000$$

Definitions.

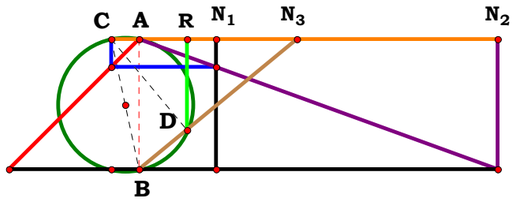
$$R - \frac{N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(1 - AC \cdot N_3\right)}{AC^2 + 2 \cdot AC \cdot N_3 + N_3^4 + 3 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_2 - N_1 \cdot N_3\right) \cdot \left(N_3^2 + 1\right)}{N_1^2 + N_2 \cdot N_3 \cdot \left(N_2 \cdot N_3^3 + 3 \cdot N_2 \cdot N_3 + 2 \cdot N_1\right) + N_2^2} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left(A \cdot C - B \cdot N_u\right)}{A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u^3\right] + C^4 \cdot \left(A^2 + B^2\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot Z \cdot o \cdot (Y \cdot o \cdot q - X \cdot Z \cdot p) \cdot \left(Z^2 + q^2\right)}{Y^2 \cdot o^2 \cdot \left(Z^4 + 3 \cdot Z^2 \cdot q^2 + q^4\right) + X \cdot p \cdot q^3 \cdot (2 \cdot Y \cdot Z \cdot o + X \cdot p \cdot q)} = 0$$

4RST1AB5R1



$N_1 = 0.58824$
$N_2 = 2.74817$
$N_3 = 1.21286$
$R = 0.36341$

Unit. $AB := 1$ **Given.** $N_1 := .58824$ $N_2 := 2.74817$ $N_3 := 1.21286$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $R := \frac{N_3 \cdot BD}{BN_3}$

$R = 0.363407$

Definitions.

$$R - \frac{N_3 \cdot (1 - AC \cdot N_3)}{N_3^2 + 1} = 0$$

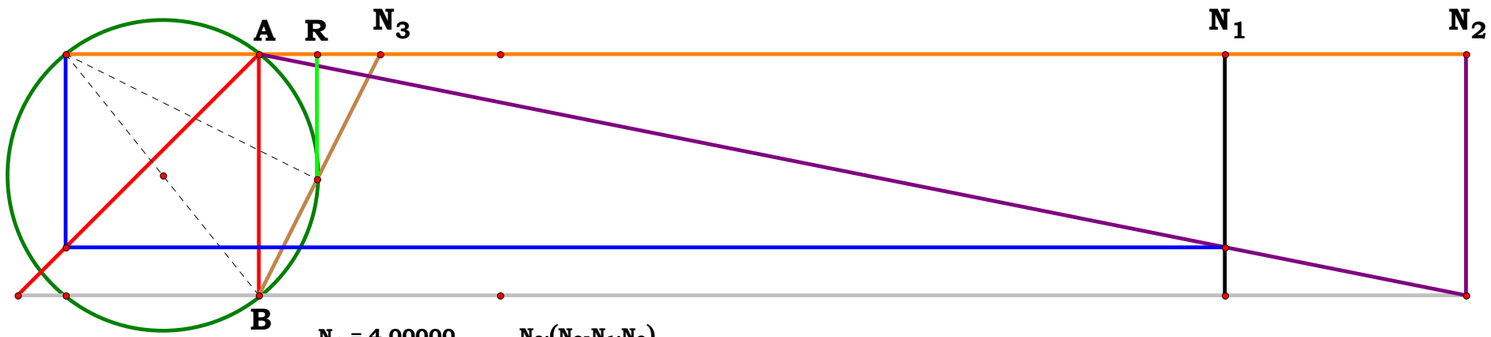
$$R - \frac{N_3 \cdot (N_2 - N_1 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{A \cdot (C^2 + N_u^2)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

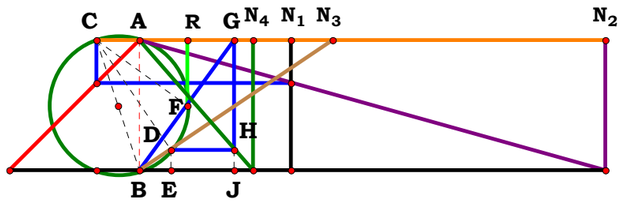
$$R - \frac{Z \cdot (Y \cdot o \cdot q - X \cdot Z \cdot p)}{Y \cdot o \cdot (Z^2 + q^2)} = 0$$



$N_1 = 4.00000$
$N_2 = 5.00000$
$N_3 = 0.50000$
$R = 0.24000$

$\frac{N_3 \cdot (N_2 - N_1 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} - R = 0.00000$

4RST1AB5R2



$N_1 = 1.15970$
$N_2 = 3.57146$
$N_3 = 1.48406$
$N_4 = 0.87149$
$R = 0.36334$

Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 3.57146$ $N_3 := 1.48406$

$N_4 := .87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

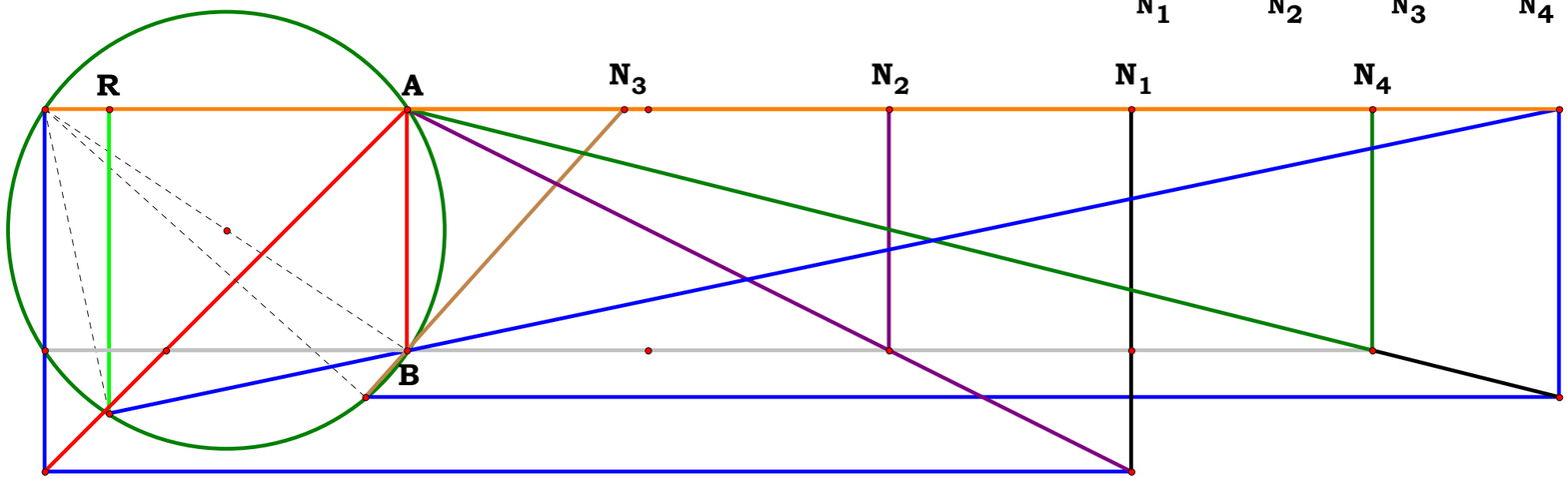
$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := AB \cdot \left(\frac{BN_3 - EN_3}{BN_3} \right)$ $AG := N_4 \cdot (AB - EF)$

$BG := \sqrt{AG^2 + AB^2}$ $CG := AG + AC$

$FG := \frac{AG \cdot CG}{BG}$ $R := AG \cdot \left(\frac{BG - FG}{BG} \right)$



$R = 0.363336$

Definitions.

$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.90000$
$N_4 = 4.00000$
$R = -1.23625$

$$\frac{N_2^2 \cdot N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3) \cdot (N_3^2 + 1) - N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_2 \cdot N_3)^2}{N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_2 \cdot N_3)^2 + N_2^3 \cdot (N_3^2 + 1)^2} - R = 0.00000$$

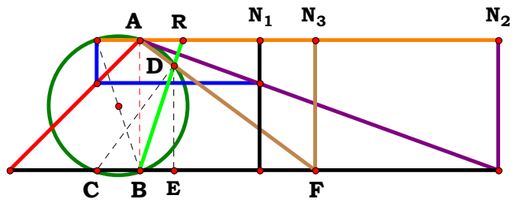
$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3) \cdot (N_3^2 - N_4 \cdot AC \cdot N_3^2 - N_4 \cdot AC^2 \cdot N_3 + 1)}{AC^2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot AC \cdot N_3^3 \cdot N_4^2 + N_3^4 \cdot N_4^2 + N_3^4 + 2 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_2^2 \cdot N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3) \cdot (N_3^2 + 1) - N_1 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_2 \cdot N_3)^2}{N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 + N_2 \cdot N_3)^2 + N_2^3 \cdot (N_3^2 + 1)^2} = 0 \quad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u) \cdot [D \cdot A^2 \cdot (C^2 + N_u^2) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u)]}{A^3 \cdot D^2 \cdot (C^2 + N_u^2)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2} = 0 \quad N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (X \cdot Y \cdot m + W \cdot n \cdot o) \cdot [X^2 \cdot m^2 \cdot p \cdot (Y^2 + o^2) - W \cdot Y \cdot Z \cdot n \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)]}{Z^2 \cdot X \cdot Y^2 \cdot m \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)^2 + X^3 \cdot m^3 \cdot p^2 \cdot (Y^2 + o^2)^2} = 0$$

4RST1AB5R3



$N_1 = 0.91756$
$N_2 = 2.74817$
$N_3 = 1.34846$
$R = 0.32679$

Unit. $AB := 1$ Given. $N_1 := .91756$ $N_2 := 2.74817$ $N_3 := 1.34846$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

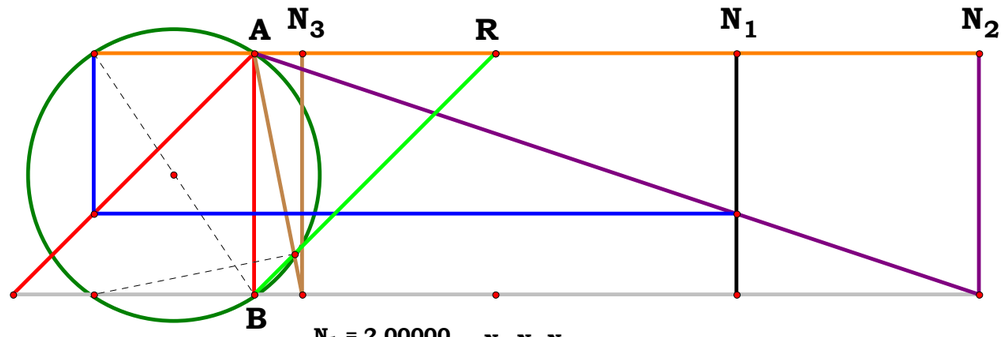
Descriptions.

$BC := \frac{N_1}{N_2}$ $AF := \sqrt{N_3^2 + AB^2}$

$CF := N_3 + BC$ $DF := \frac{N_3 \cdot CF}{AF}$

$BE := \frac{N_3 \cdot (AF - DF)}{AF}$ $R := \frac{AF \cdot BE}{DF}$

$R = 0.326792$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.20000$
$R = 1.00000$
$\frac{N_2 - N_1 \cdot N_3}{N_1 + N_2 \cdot N_3} = 1.00000$

Definitions.

$R - \left(\frac{BC^2 + 1}{BC + N_3} - BC \right) = 0$

$R - \frac{N_2 - N_1 \cdot N_3}{N_1 + N_2 \cdot N_3} = 0$

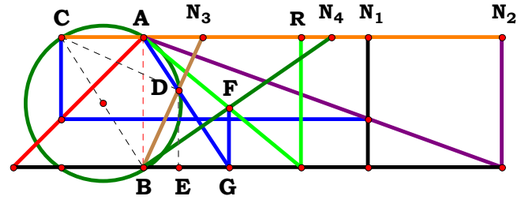
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot C - B \cdot N_u}{B \cdot C + A \cdot N_u} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot o \cdot q - X \cdot Z \cdot p}{Y \cdot Z \cdot o + X \cdot p \cdot q} = 0$

4RST1AB5R4



$N_1 = 1.72148$
$N_2 = 2.74817$
$N_3 = 0.45737$
$N_4 = 1.44295$
$R = 1.21076$

Unit. $AB := 1$ Given. $N_1 := 1.72148$ $N_2 := 2.74817$ $N_3 := .45737$ $N_4 := 1.44295$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

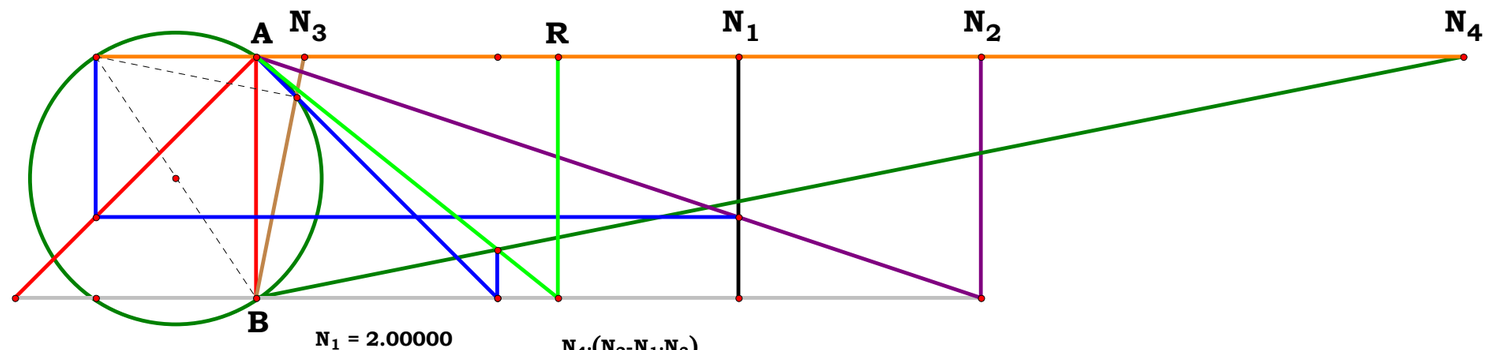
$AC := \frac{N_1}{N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$BG := \frac{BE \cdot BN_3}{DN_3}$ $FG := \frac{AB \cdot BG}{N_4}$

$R := \frac{BG \cdot AB}{AB - FG}$ $R = 1.210742$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.20000$
$N_4 = 5.00000$
$R = 1.25000$

$\frac{N_4 \cdot (N_2 - N_1 \cdot N_3)}{(N_1 \cdot N_3 - N_2) + N_1 \cdot N_4 + N_2 \cdot N_3 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{N_4 - AC \cdot N_3 \cdot N_4}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_4 \cdot (N_2 - N_1 \cdot N_3)}{N_1 \cdot N_3 - N_2 + N_1 \cdot N_4 + N_2 \cdot N_3 \cdot N_4} = 0$$

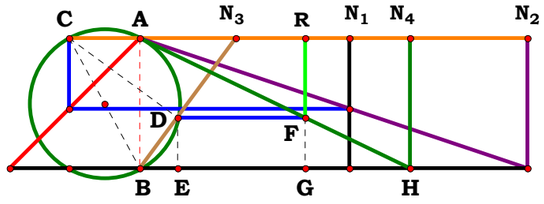
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot (X \cdot m \cdot o - W \cdot Y \cdot n)}{X \cdot m \cdot (Y \cdot Z - o \cdot p) + W \cdot n \cdot (Y \cdot p + Z \cdot o)} = 0$$

4RST1AB5R5



$N_1 = 1.60525$
$N_2 = 2.97094$
$N_3 = 0.73826$
$N_4 = 2.07253$
$R = 1.26619$

Unit. $AB := 1$ Given. $N_1 := 1.60525$ $N_2 := 2.9709$ $N_3 := .73826$ $N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

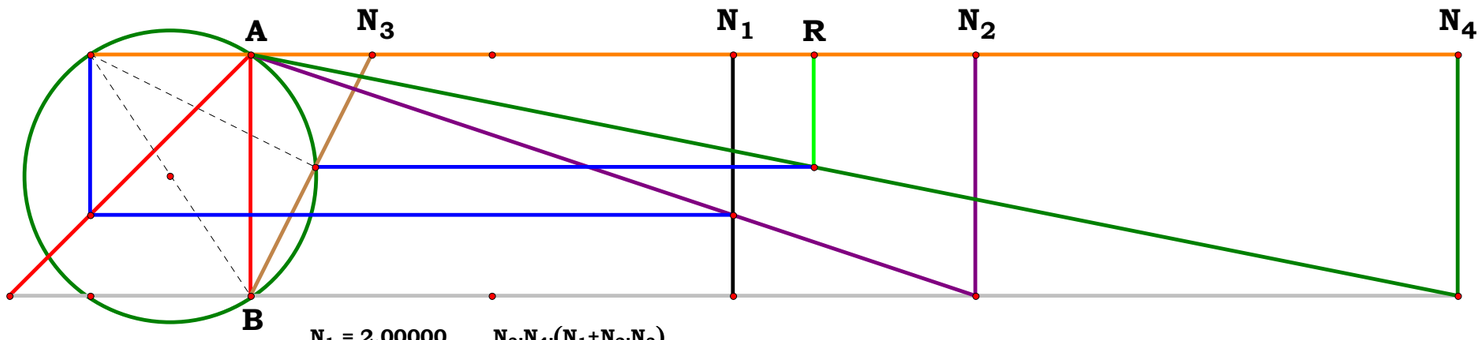
Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$R := N_4 \cdot (AB - DE)$ $R = 1.266203$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 5.00000$
$R = 2.33333$

$\frac{N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{N_3^2 + 1} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} = 0$$

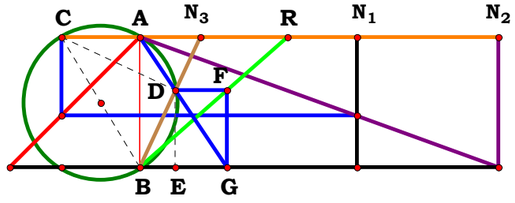
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{A \cdot D \cdot (C^2 + N_u^2)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)}{p \cdot (X \cdot m \cdot Y^2 + X \cdot m \cdot o^2)} = 0$$

4RST1AB5R6



$N_1 = 1.66336$
$N_2 = 2.74817$
$N_3 = 0.46705$
$R = 1.13599$

Unit. $AB := 1$ Given. $N_1 := 1.66336$ $N_2 := 2.74817$ $N_3 := .46705$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

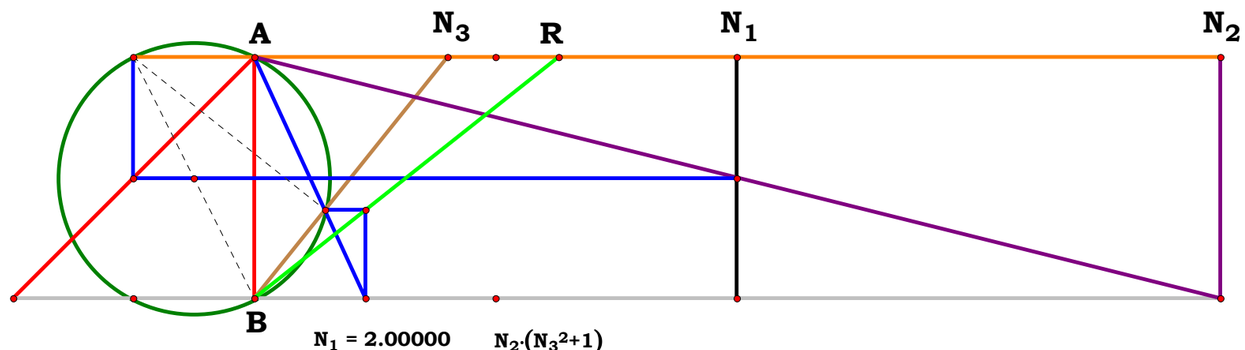
$AC := \frac{N_1}{N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$BE := N_3 \cdot DE$ $BG := \frac{BE \cdot AB}{(AB - DE)}$

$R := \frac{BG \cdot AB}{DE}$ $R = 1.135991$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 0.80000$
$R = 1.26154$

$\frac{N_2 \cdot (N_3^2+1)}{N_1+N_2 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_3^2 + 1}{AC + N_3} = 0$

$R - \frac{N_2 \cdot \left(N_3^2 + 1\right)}{N_1 + N_2 \cdot N_3} = 0$

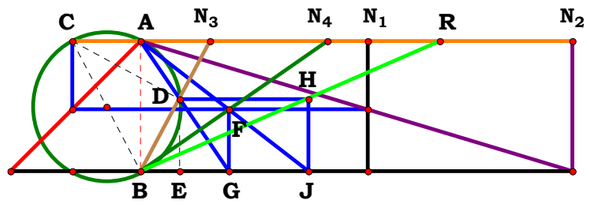
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot \left(C^2 + N_u^2\right)}{B \cdot C^2 + A \cdot N_u \cdot C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot o \cdot \left(Z^2 + q^2\right)}{X \cdot p \cdot q^2 + Y \cdot Z \cdot o \cdot q} = 0$

4RST1AB5R7



$N_1 = 1.74085$
$N_2 = 3.30995$
$N_3 = 0.53485$
$N_4 = 1.43327$
$R = 2.29918$

Unit. $AB := 1$ Given. $N_1 := 1.74085$ $N_2 := 3.30995$ $N_3 := .53485$ $N_4 := 1.43347$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

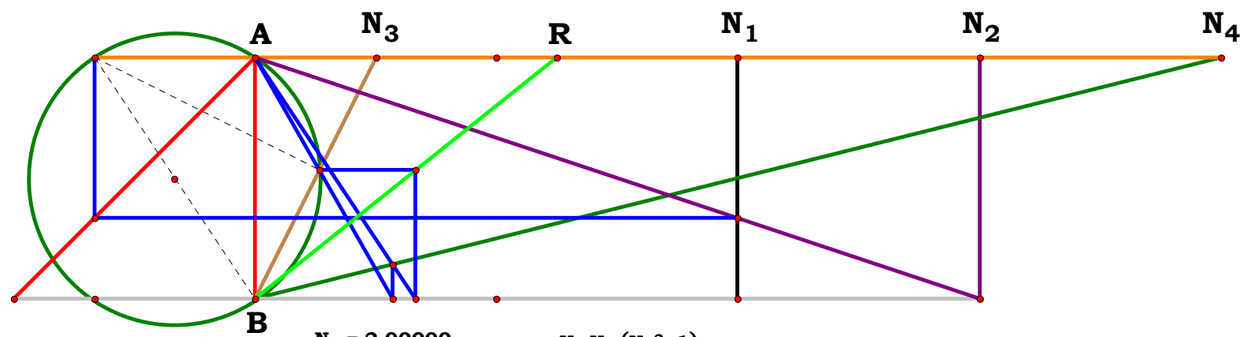
$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$DE := \frac{AB \cdot BD}{BN_3}$ $BG := \frac{BE \cdot AB}{AB - DE}$

$FG := \frac{AB \cdot BG}{N_4}$ $BJ := \frac{BG}{AB - FG}$

$R := \frac{BJ \cdot AB}{DE}$ $R = 2.298906$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 4.00000$
$R = 1.25000$

$\frac{N_2 \cdot N_4 \cdot (N_3^2+1)}{(N_1 \cdot N_3 - N_2) + N_1 \cdot N_4 + N_2 \cdot N_3 \cdot N_4} - R = 0.00000$

Definitions.

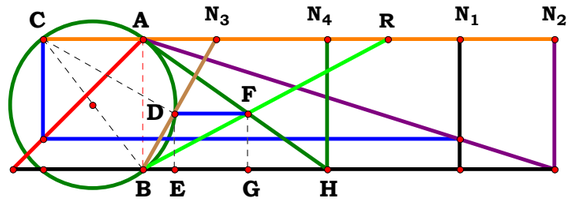
$R - \frac{N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$

$R - \frac{N_2 \cdot N_4 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 - N_2 + N_1 \cdot N_4 + N_2 \cdot N_3 \cdot N_4} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{A \cdot C \cdot (N_u^2 - C \cdot D) + B \cdot C \cdot N_u \cdot (C + D)} = 0$ $N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Z \cdot m \cdot (Y^2 + o^2)}{o \cdot [X \cdot m \cdot (Y \cdot Z - o \cdot p) + W \cdot n \cdot (Y \cdot p + Z \cdot o)]} = 0$

4RST1AB5R8



$N_1 = 2.42854$
$N_2 = 3.15497$
$N_3 = 0.56391$
$N_4 = 1.41390$
$R = 1.87893$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 3.15497$ $N_3 := .56391$

$N_4 := 1.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

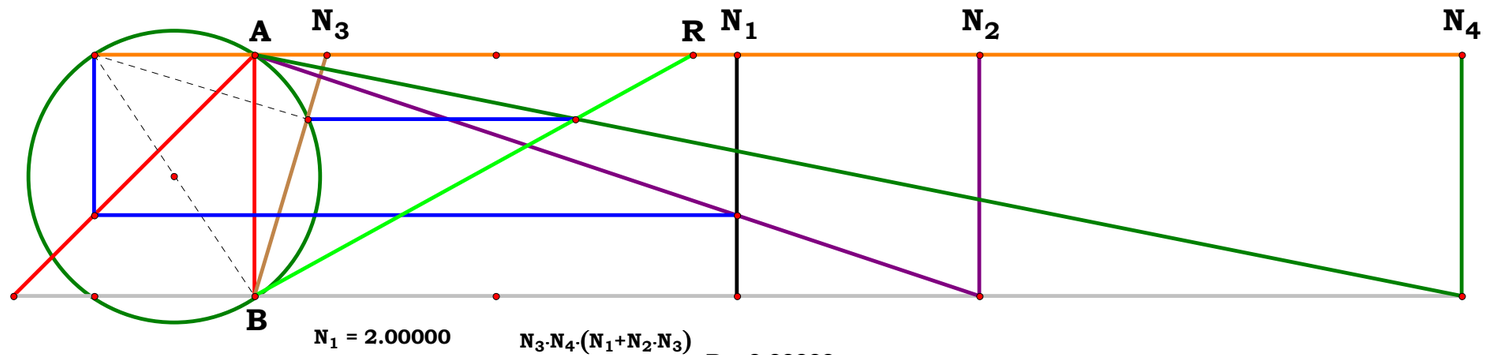
Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3}$ $BG := N_4 \cdot (AB - DE)$

$R := \frac{BG \cdot AB}{DE}$ $R = 1.878932$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.30000$
$N_4 = 5.00000$
$R = 1.81250$

$\frac{N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3)}{N_2 - N_1 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{(1 - AC \cdot N_3)} = 0$

$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2 \cdot N_3)}{N_2 - N_1 \cdot N_3} = 0$

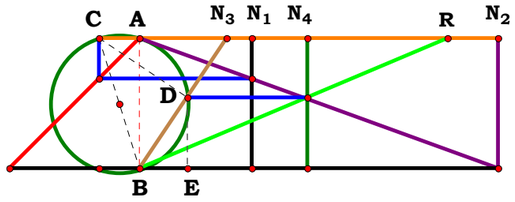
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{D \cdot (A \cdot C^2 - B \cdot C \cdot N_u)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)}{p \cdot (X \cdot m \cdot o^2 - W \cdot Y \cdot n \cdot o)} = 0$

4RST1AB5R9



$N_1 = 0.85944$
$N_2 = 2.74817$
$N_3 = 0.67045$
$N_4 = 1.28798$
$R = 2.36224$

Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 2.74817$ $N_3 := .67045$

$N_4 := 1.28798$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

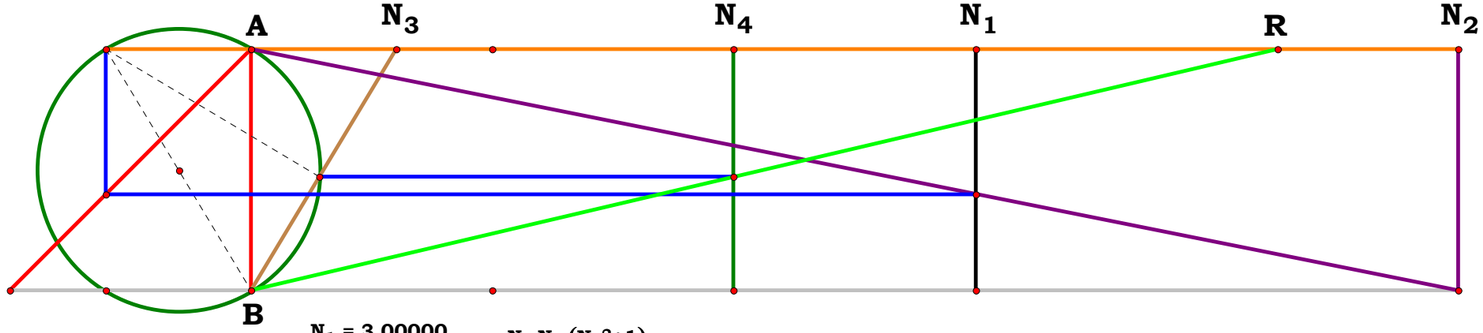
Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_3 := N_3 + AC$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3}$ $R := \frac{N_4}{DE}$

$R = 2.36222$



$N_1 = 3.00000$
$N_2 = 5.00000$
$N_3 = 0.60000$
$N_4 = 2.00000$
$R = 4.25000$

$\frac{N_2 \cdot N_4 \cdot (N_3^2+1)}{N_2 - N_1 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{-N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 - 1} = 0$

$R - \frac{N_2 \cdot N_4 \cdot (N_3^2 + 1)}{N_2 - N_1 \cdot N_3} = 0$

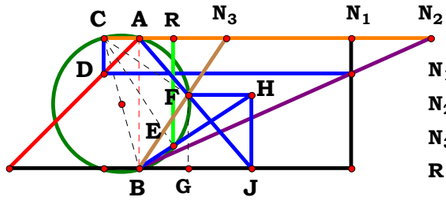
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{D \cdot [C \cdot (A \cdot C - B \cdot N_u)]} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Z \cdot m \cdot (Y^2 + o^2)}{p \cdot o \cdot (X \cdot m \cdot o - W \cdot Y \cdot n)} = 0$

4RST1AB6R0



$N_1 = 1.62462$
$N_2 = 2.23482$
$N_3 = 0.67045$
$R = 0.26541$

Unit. $AB := 1$ **Given.** $N_1 := 1.62462$ $N_2 := 2.23482$ $N_3 := .67045$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

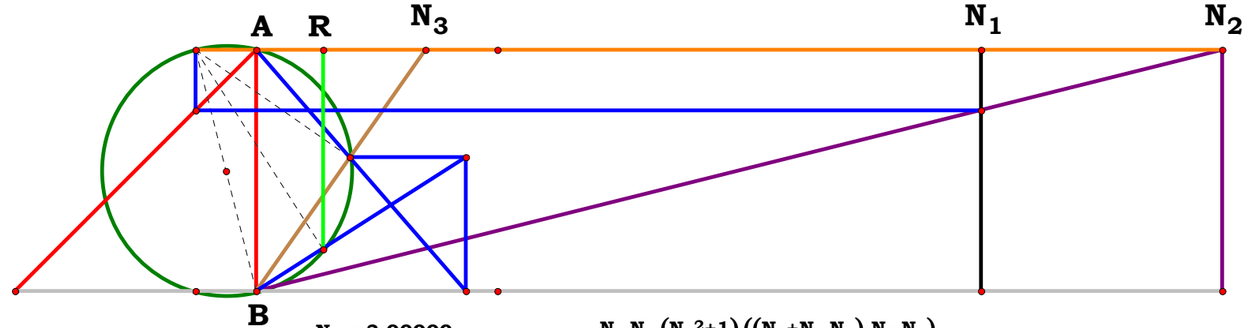
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$ $FN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BF := BN_3 - FN_3$ $FG := \frac{AB \cdot BF}{BN_3}$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $GJ := \frac{BG \cdot BF}{FN_3}$ $BJ := BG + GJ$

$HJ := FG$ $AK := \frac{BJ \cdot AB}{HJ}$ $BK := \sqrt{AK^2 + AB^2}$ $CK := AK + AC$

$EK := \frac{AK \cdot CK}{BK}$ $BE := BK - EK$ $R := \frac{AK \cdot BE}{BK}$ $R = 0.265414$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.70000$
$R = 0.27556$

$\frac{N_2 \cdot N_3 \cdot (N_3^2+1) \cdot ((N_2+N_1 \cdot N_3)-N_2 \cdot N_3)}{(N_1^2-2 \cdot N_1 \cdot N_2 \cdot N_3-2 \cdot N_1 \cdot N_2)+N_2^2 \cdot N_3 \cdot (N_3^3+3 \cdot N_3+2)+2 \cdot N_2^2} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(1 - AC \cdot N_3\right)}{AC^2 + 2 \cdot AC \cdot N_3 + N_3^4 + 3 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)}{N_1^2 - 2 \cdot N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_2 + N_2^2 \cdot N_3 \cdot \left(N_3^3 + 3 \cdot N_3 + 2\right) + 2 \cdot N_2^2} = 0$$

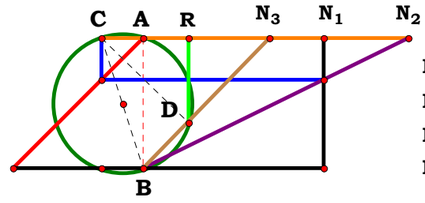
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + 2 \cdot C^3 \cdot A \cdot N_u \cdot (A - B) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot o \cdot \left(Z^2 + q^2\right) \cdot (X \cdot Z \cdot p - Y \cdot Z \cdot o + Y \cdot o \cdot q)}{p^2 \cdot q^4 \cdot X^2 - 2 \cdot X \cdot Y \cdot o \cdot p \cdot q^3 \cdot (Z + q) + Y^2 \cdot o^2 \cdot \left(Z^4 + 3 \cdot Z^2 \cdot q^2 + 2 \cdot Z \cdot q^3 + 2 \cdot q^4\right)} = 0$$

4RST1AB6R1



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.97071$
$R = 0.34480$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .97071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BD := BN_3 - DN_3$ $R := \frac{N_3 \cdot BD}{BN_3}$

$R = 0.344798$

Definitions.

$$R - \frac{N_3 \cdot \left(1 - AC \cdot N_3\right)}{N_3^2 + 1} = 0$$

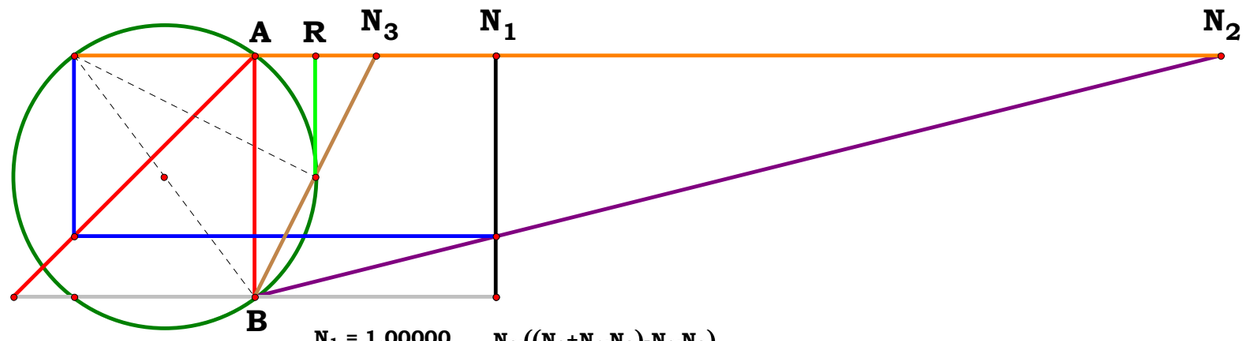
$$R - \frac{N_3 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)}{N_2 \cdot \left(N_3^2 + 1\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{A \cdot \left(C^2 + N_u^2\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

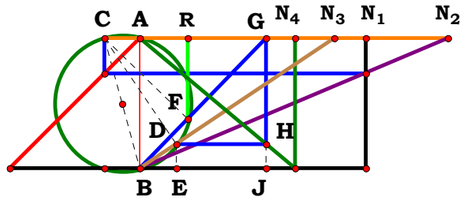
$$R - \frac{Z \cdot (X \cdot Z \cdot p - Y \cdot Z \cdot o + Y \cdot o \cdot q)}{\left[Y \cdot o \cdot \left(Z^2 + q^2\right)\right]} = 0$$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 0.50000$
$R = 0.25000$

$\frac{N_3 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} - R = 0.00000$

4RST1AB6R2



$N_1 = 1.73116$
$N_2 = 2.36074$
$N_3 = 1.49375$
$N_4 = 1.19112$
$R = 0.37056$

Unit. $AB := 1$ Given. $N_1 := 1.73116$ $N_2 := 2.36074$ $N_3 := 1.49375$ $N_4 := 1.19112$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

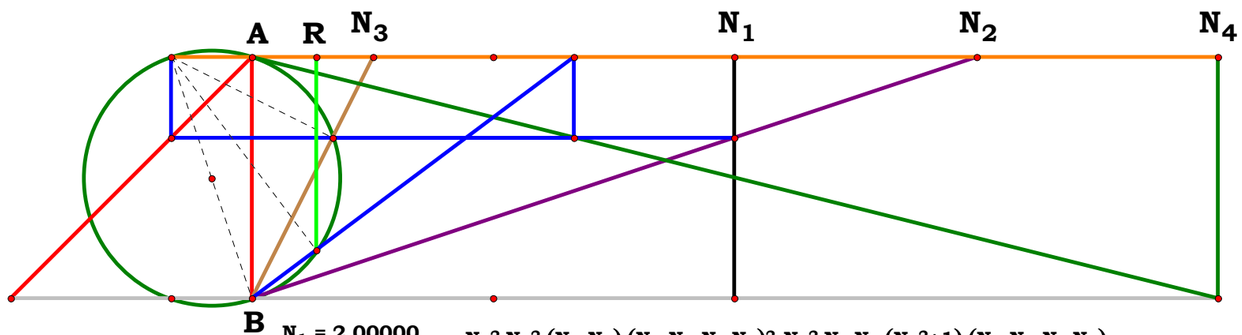
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := AB \cdot \left(\frac{BN_3 - EN_3}{BN_3} \right)$ $AG := N_4 \cdot (AB - EF)$

$BG := \sqrt{AG^2 + AB^2}$ $CG := AG + AC$

$FG := \frac{AG \cdot CG}{BG}$ $R := AG \cdot \left(\frac{BG - FG}{BG} \right)$

$R = 0.370564$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 4.00000$
$R = 0.26667$

$$\frac{N_3^2 \cdot N_4^2 \cdot (N_1 - N_2) \cdot (N_1 - N_2 - N_2 \cdot N_3)^2 - N_2^2 \cdot N_3 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2 - N_2 \cdot N_3)}{N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 - N_2 - N_2 \cdot N_3)^2 + N_2^3 \cdot (N_3^2 + 1)^2} - R = 0.00000$$

Definitions.

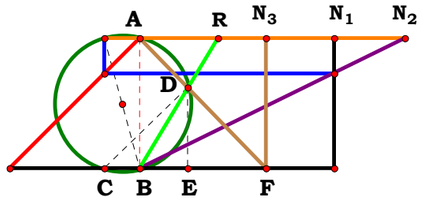
$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3) \cdot \left(N_3^2 - AC \cdot N_3^2 \cdot N_4 - AC^2 \cdot N_3 \cdot N_4 + 1 \right)}{AC^2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot AC \cdot N_3^3 \cdot N_4^2 + N_3^4 \cdot N_4^2 + N_3^4 + 2 \cdot N_3^2 + 1} = 0$$

$$R - \frac{N_3^2 \cdot N_4^2 \cdot (N_1 - N_2) \cdot (N_1 - N_2 - N_2 \cdot N_3)^2 - N_2^2 \cdot N_3 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2 - N_2 \cdot N_3)}{N_2 \cdot N_3^2 \cdot N_4^2 \cdot (N_1 - N_2 - N_2 \cdot N_3)^2 + N_2^3 \cdot (N_3^2 + 1)^2} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [C \cdot (A - B) + A \cdot N_u] \cdot [A^2 \cdot (C^2 + N_u^2) \cdot D + N_u^2 \cdot (B - A) \cdot [C \cdot (A - B) + A \cdot N_u]]}{D^2 \cdot A^3 \cdot (C^2 + N_u^2)^2 + A \cdot N_u^4 \cdot (A \cdot C - B \cdot C + A \cdot N_u)^2} = 0 \qquad N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot n \cdot o - X \cdot Y \cdot m - X \cdot m \cdot o) \cdot [Z \cdot Y \cdot (W \cdot n - X \cdot m) \cdot (W \cdot n \cdot o - X \cdot Y \cdot m - X \cdot m \cdot o) - (p \cdot X^2 \cdot Y^2 \cdot m^2 + p \cdot X^2 \cdot m^2 \cdot o^2)]}{m \cdot X \cdot [Z^2 \cdot Y^2 \cdot (W \cdot n \cdot o - X \cdot Y \cdot m - X \cdot m \cdot o)^2 + X^2 \cdot m^2 \cdot p^2 \cdot (Y^2 + o^2)^2]} = 0$$

4RST1AB6R3



$N_1 = 1.48902$
$N_2 = 2.03142$
$N_3 = 0.97071$
$R = 0.59853$

Unit. $AB := 1$ Given. $N_1 := 1.48902$ $N_2 := 2.03142$ $N_3 := .97071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$BC := \frac{N_2 - N_1}{N_2}$ $AF := \sqrt{N_3^2 + AB^2}$

$CF := N_3 + BC$ $DF := \frac{N_3 \cdot CF}{AF}$

$BE := \frac{N_3 \cdot (AF - DF)}{AF}$ $R := \frac{AF \cdot BE}{DF}$

$R = 0.598534$

Definitions.

$$R - \left(\frac{BC^2 + 1}{BC + N_3} - BC \right) = 0$$

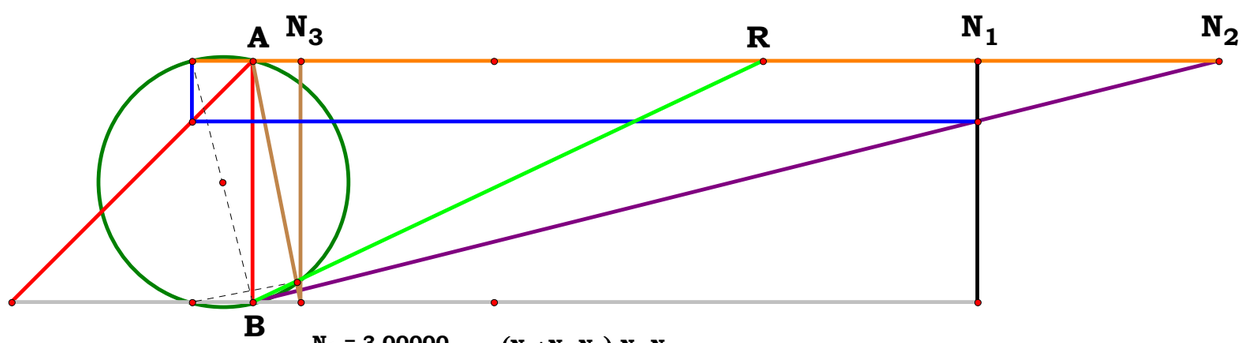
$$R - \frac{N_2 + N_1 \cdot N_3 - N_2 \cdot N_3}{N_2 - N_1 + N_2 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot C + N_u \cdot (B - A)}{C \cdot (A - B) + A \cdot N_u} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Z \cdot p - Y \cdot Z \cdot o + Y \cdot o \cdot q}{Y \cdot Z \cdot o - X \cdot p \cdot q + Y \cdot o \cdot q} = 0$$

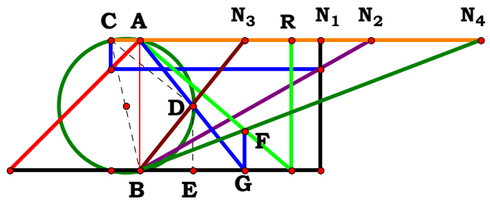


$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.20000$

$\frac{(N_2+N_1 \cdot N_3)-N_2 \cdot N_3}{(N_2-N_1)+N_2 \cdot N_3} - R = 0.00000$

$R = 2.11111$

4RST1AB6R4



$N_1 = 1.38247$
$N_2 = 1.76991$
$N_3 = 0.80606$
$N_4 = 2.61493$
$R = 1.15992$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 1.76991$ $N_3 := .80606$ $N_4 := 2.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

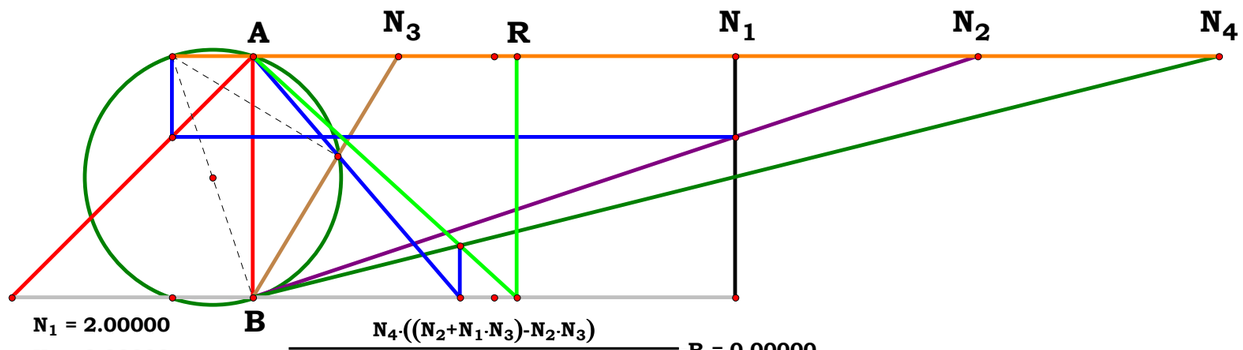
$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$BD := BN_3 - DN_3 \qquad BE := \frac{N_3 \cdot BD}{BN_3}$$

$$BG := \frac{BE \cdot BN_3}{DN_3} \qquad FG := \frac{AB \cdot BG}{N_4}$$

$$R := \frac{BG \cdot AB}{AB - FG} \qquad R = 1.159894$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.60000$
$N_4 = 4.00000$
$R = 1.09091$

$$\frac{N_4 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{(N_2 \cdot N_3 - N_1 \cdot (N_3 + N_4) - N_2) + N_2 \cdot N_4 \cdot (N_3 + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 - AC \cdot N_3 \cdot N_4}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_4 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)}{N_2 \cdot N_3 - N_1 \cdot (N_3 + N_4) - N_2 + N_2 \cdot N_4 \cdot (N_3 + 1)} = 0$$

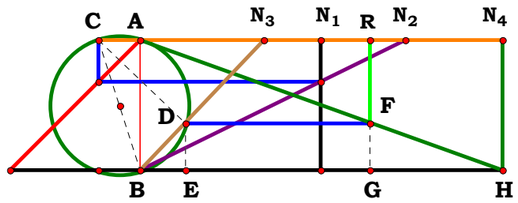
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot [A \cdot C + N_u \cdot (B - A)]}{A \cdot N_u^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o)}{X \cdot m \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p) - W \cdot n \cdot (Y \cdot p + Z \cdot o)} = 0$$

4RST1AB6R5



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.95134$
$N_4 = 2.77959$
$R = 1.76395$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .95134$ $N_4 := 2.77959$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $CN_3 := AC + N_3$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$

$BD := BN_3 - DN_3$ $DE := \frac{AB \cdot BD}{BN_3}$

$R := N_4 \cdot (AB - DE)$ $R = 1.763951$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{N_3^2 + 1} = 0$$

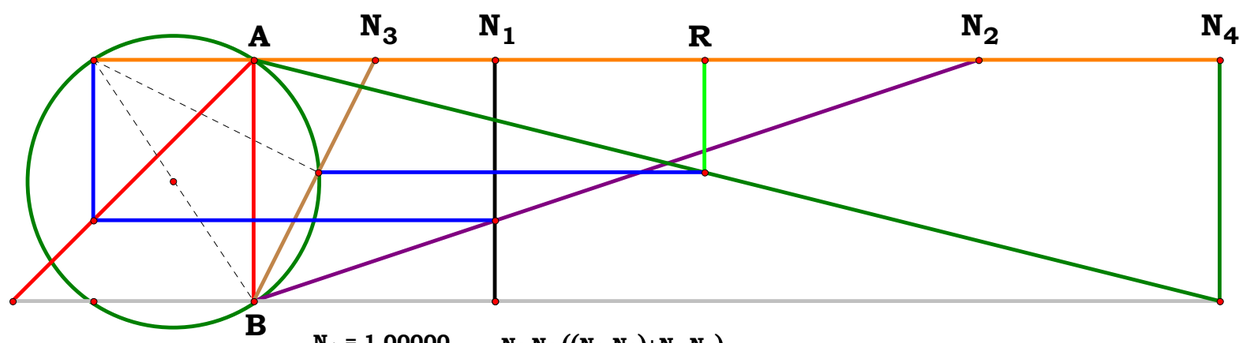
$$R - \frac{N_3 \cdot N_4 \cdot (N_2 - N_1 + N_2 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u^2 \cdot [C \cdot (A - B) + A \cdot N_u]}{A \cdot D \cdot (C^2 + N_u^2)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (X \cdot Y \cdot m - W \cdot n \cdot o + X \cdot m \cdot o)}{p \cdot (X \cdot m \cdot Y^2 + X \cdot m \cdot o^2)} = 0$$

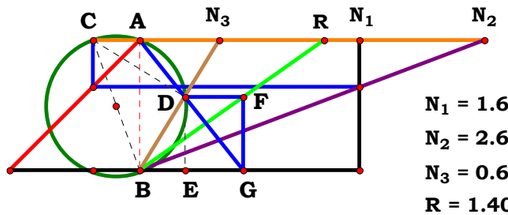


$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 4.00000$

$\frac{N_3 \cdot N_4 \cdot ((N_2 - N_1) + N_2 \cdot N_3)}{N_2 \cdot (N_3^2 + 1)} - R = 0.00000$

$R = 1.86667$

4RST1AB6R6



$N_1 = 1.68273$
$N_2 = 2.64163$
$N_3 = 0.61234$
$R = 1.40973$

Unit. $AB := 1$ Given. $N_1 := 1.68273$ $N_2 := 2.64163$ $N_3 := .61234$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

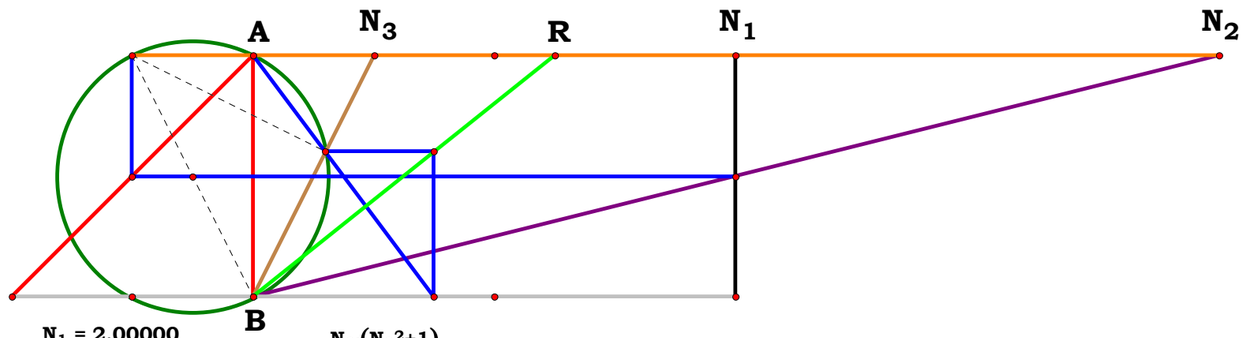
$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_3 := AC + N_3$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad DN_3 := \frac{CN_3 \cdot N_3}{BN_3}$$

$$BD := BN_3 - DN_3 \qquad DE := \frac{AB \cdot BD}{BN_3}$$

$$BE := N_3 \cdot DE \qquad BG := \frac{BE \cdot AB}{(AB - DE)}$$

$$R := \frac{BG \cdot AB}{DE} \qquad R = 1.40973$$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 0.50000$

$\frac{N_2 \cdot (N_3^2+1)}{(N_2-N_1)+N_2 \cdot N_3} - R = 0.00000$

$R = 1.25000$

Definitions.

$$R - \frac{N_3^{\,2} + 1}{AC + N_3} = 0$$

$$R - \frac{N_2 \cdot \left(N_3^{\,2} + 1\right)}{N_2 - N_1 + N_2 \cdot N_3} = 0$$

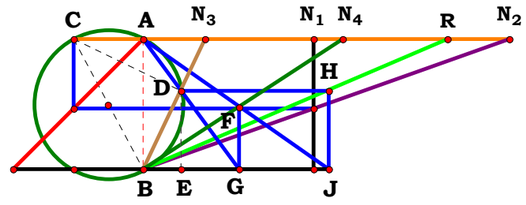
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot \left(C^2 + N_u^{\,2}\right)}{C \cdot \left[C \cdot (A - B) + A \cdot N_u\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot o \cdot \left(Z^2 + q^2\right)}{q \cdot (Y \cdot Z \cdot o - X \cdot p \cdot q + Y \cdot o \cdot q)} = 0$$

4RST1AB6R7



$N_1 = 1.30499$
$N_2 = 2.80628$
$N_3 = 0.47674$
$N_4 = 1.53013$
$R = 2.33832$

Unit. $AB := 1$ **Given.** $N_1 := 1.30499$ $N_2 := 2.80628$ $N_3 := .47674$ $N_4 := 1.53013$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

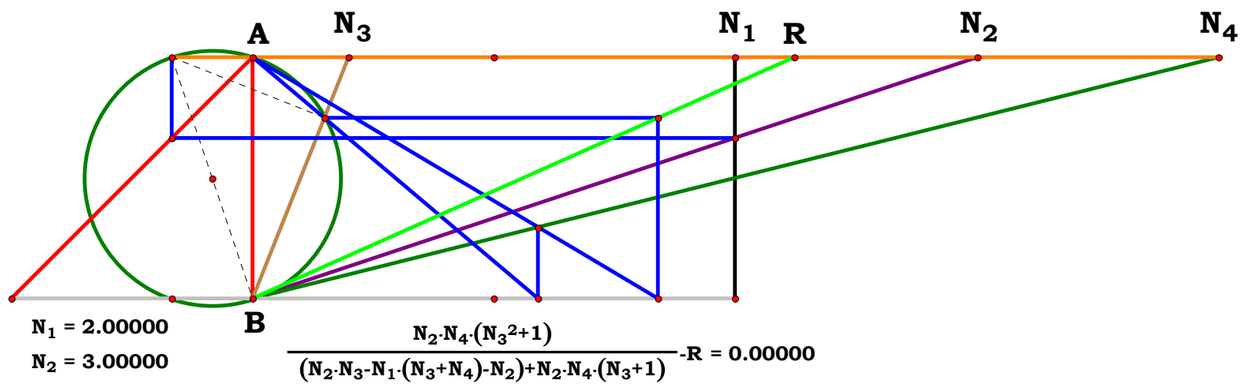
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BD := BN_3 - DN_3$ $BE := \frac{N_3 \cdot BD}{BN_3}$

$DE := \frac{AB \cdot BD}{BN_3}$ $BG := \frac{BE \cdot AB}{AB - DE}$ $FG := \frac{AB \cdot BG}{N_4}$

$BJ := \frac{BG}{AB - FG}$ $R := \frac{BJ \cdot AB}{DE}$ $R = 2.338314$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.40000$
$N_4 = 4.00000$
$R = 2.24516$

$$\frac{N_2 \cdot N_4 \cdot (N_3^2+1)}{(N_2 \cdot N_3 - N_1 \cdot (N_3+N_4) - N_2) + N_2 \cdot N_4 \cdot (N_3+1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot \left(N_3^2 + 1\right)}{AC \cdot N_3 + AC \cdot N_4 + N_3 \cdot N_4 - 1} = 0$$

$$R - \frac{N_2 \cdot N_4 \cdot \left(N_3^2 + 1\right)}{N_2 \cdot N_3 - N_1 \cdot \left(N_3 + N_4\right) - N_2 + N_2 \cdot N_4 \cdot \left(N_3 + 1\right)} = 0$$

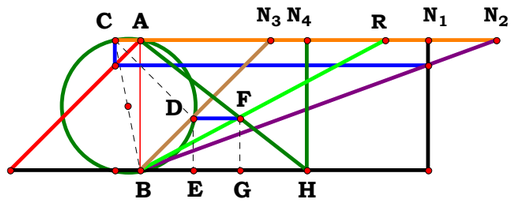
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right)}{C \cdot \left[A \cdot N_u^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Z \cdot m \cdot \left(Y^2 + o^2\right)}{o \cdot [X \cdot m \cdot (Y \cdot Z + Y \cdot p + Z \cdot o - o \cdot p) - W \cdot n \cdot (Y \cdot p + Z \cdot o)]} = 0$$

4RST1AB6R8



$N_1 = 2.20577$
$N_2 = 2.72880$
$N_3 = 0.99977$
$N_4 = 1.27829$
$R = 1.88362$

Unit. $AB := 1$ Given. $N_1 := 2.20577$ $N_2 := 2.72880$ $N_3 := .99977$ $N_4 := 1.27829$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

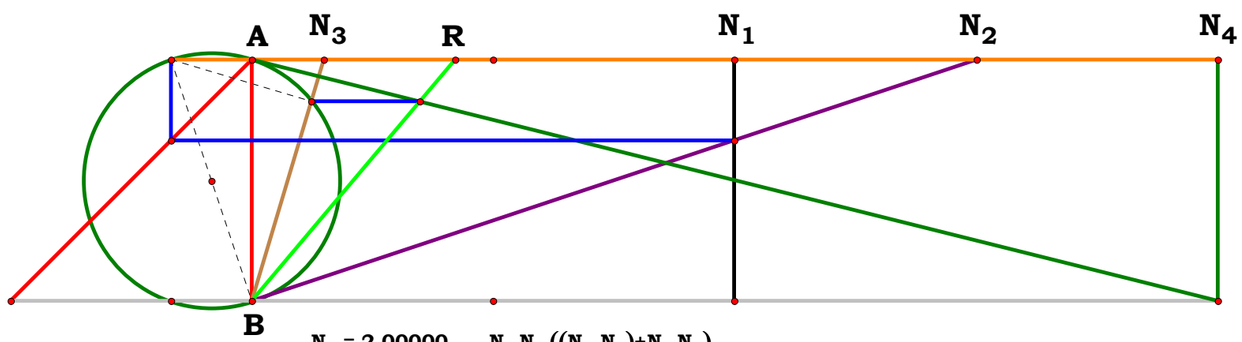
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad BG := N_4 \cdot (AB - DE)$$

$$R := \frac{BG \cdot AB}{DE} \qquad R = 1.883604$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.30000$
$N_4 = 4.00000$
$R = 0.84444$

$$\frac{N_3 \cdot N_4 \cdot ((N_2 - N_1) + N_2 \cdot N_3)}{(N_2 + N_1 \cdot N_3) - N_2 \cdot N_3} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC + N_3)}{(1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_2 - N_1 + N_2 \cdot N_3)}{N_2 + N_1 \cdot N_3 - N_2 \cdot N_3} = 0$$

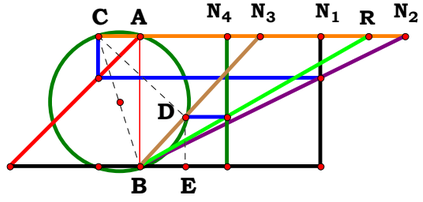
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u^{\,2} \cdot [C \cdot (A - B) + A \cdot N_u]}{D \cdot [A \cdot C^2 + C \cdot N_u \cdot (B - A)]} = 0$$

$$N_1 - \frac{W}{m} = 0 \qquad N_2 - \frac{X}{n} = 0 \qquad N_3 - \frac{Y}{o} = 0 \qquad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (X \cdot Y \cdot m - W \cdot n \cdot o + X \cdot m \cdot o)}{p \cdot o \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o)} = 0$$

4RST1AB6R9



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.92228$
$N_4 = 0.66809$
$R = 1.75280$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .92228$ $N_4 := .66809$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

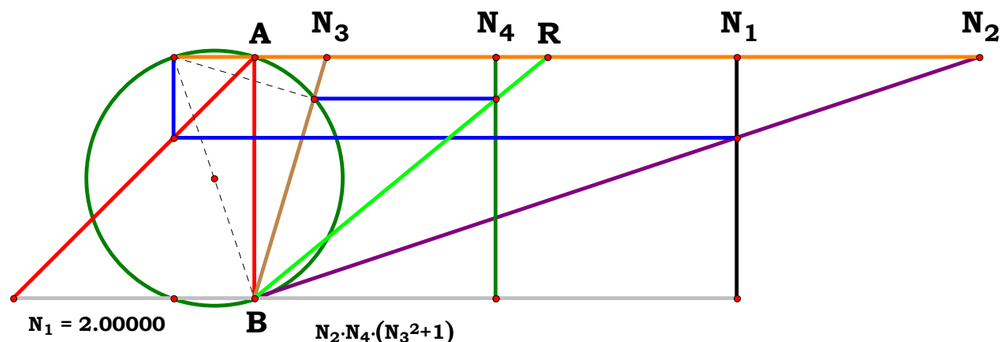
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad DN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$DE := \frac{AB \cdot (BN_3 - DN_3)}{BN_3} \qquad R := \frac{N_4}{DE}$$

$R = 1.752789$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.30000$
$N_4 = 1.00000$

$$\frac{N_2 \cdot N_4 \cdot (N_3^2+1)}{(N_2+N_1 \cdot N_3)-N_2 \cdot N_3} - x_R = 0.00000$$

$x_R = 1.21111$

Definitions.

$$R - \frac{-N_4 \cdot (N_3^2 + 1)}{AC \cdot N_3 - 1} = 0$$

$$R - \frac{N_2 \cdot N_4 \cdot (N_3^2 + 1)}{N_2 + N_1 \cdot N_3 - N_2 \cdot N_3} = 0$$

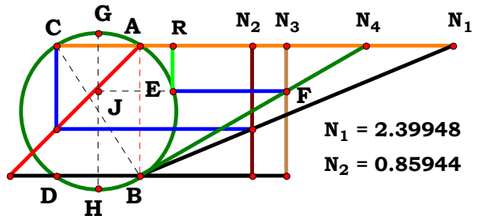
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{D \cdot [A \cdot C^2 - C \cdot N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{W}{m} = 0 \qquad N_2 - \frac{X}{n} = 0 \qquad N_3 - \frac{Y}{o} = 0 \qquad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{X \cdot Z \cdot m \cdot (Y^2 + o^2)}{p \cdot o \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o)} = 0$$

4RST2AB1R2



$N_3 = 1.12569$
$N_4 = 1.73353$
$N_1 = 2.39948$
$N_2 = 0.85944$
$R = 0.25413$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := .85944$ $N_3 := 1.12569$ $N_4 := 1.73353$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

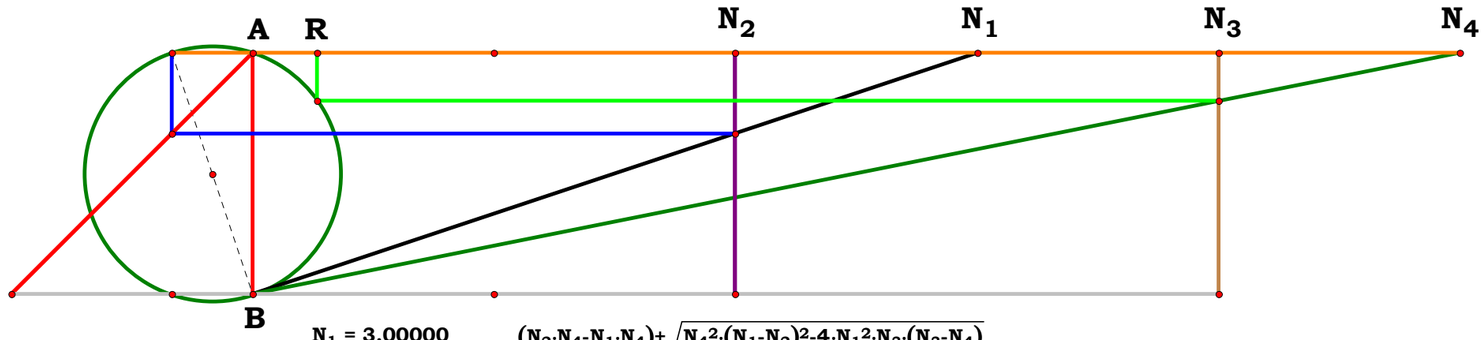
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $GH := \sqrt{AB^2 + AC^2}$

$GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2}$

$EJ := \sqrt{GJ \cdot (GH - GJ)}$

$R := EJ - \frac{AC}{2}$ $R = 0.254132$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.26667$

$\frac{(N_2 \cdot N_4 - N_1 \cdot N_4) + \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{N_4^2}}{2 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_2 \cdot N_4 - N_1 \cdot N_4 + \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot N_4} = 0$$

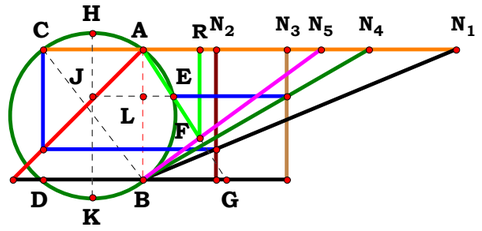
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + A \cdot C - B \cdot C}{2 \cdot B \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2 \cdot o^2 \cdot (W \cdot n - X \cdot m)^2 + 4 \cdot W^2 \cdot Y \cdot n^2 \cdot p \cdot (Z \cdot o - Y \cdot p)} - W \cdot Z \cdot n \cdot o + X \cdot Z \cdot m \cdot o}{2 \cdot W \cdot Z \cdot n \cdot o} = 0$$

4RST2AB1R3



$N_1 = 2.39948$
$N_2 = 0.55918$
$N_3 = 1.10631$
$N_4 = 1.73353$
$N_5 = 1.36570$
$R = 0.43546$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .55918$ $N_3 := 1.10631$

$N_4 := 1.73352$ $N_5 := 1.36570$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

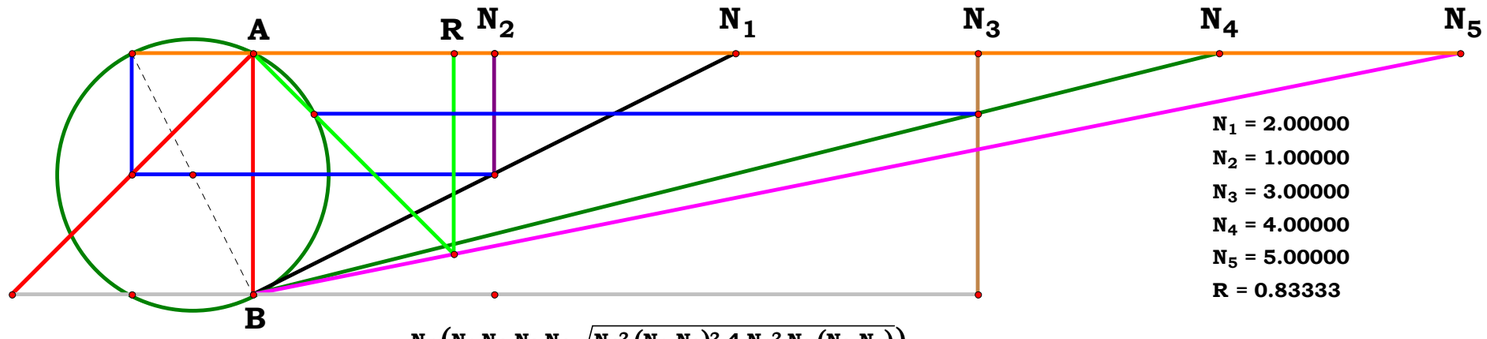
Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad HK := \sqrt{AB^2 + AC^2}$$

$$AL := \frac{N_4 - N_3}{N_4} \qquad HJ := AL + \frac{HK - AB}{2}$$

$$EJ := \sqrt{HJ \cdot (HK - HJ)} \qquad BG := \frac{\left(EJ - \frac{AC}{2}\right) \cdot AB}{AL}$$

$$R := \frac{N_5 \cdot BG}{N_5 + BG} \qquad R = 0.435456$$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 0.83333$

$$\frac{N_5 \cdot (N_1 \cdot N_4 - N_2 \cdot N_4 - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)})}{((N_1 \cdot N_4 - N_2 \cdot N_4) + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4)) - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot (AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[N_1 \cdot N_4 - N_2 \cdot N_4 - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}\right]}{N_1 \cdot N_4 - N_2 \cdot N_4 - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)} + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4)} = 0$$

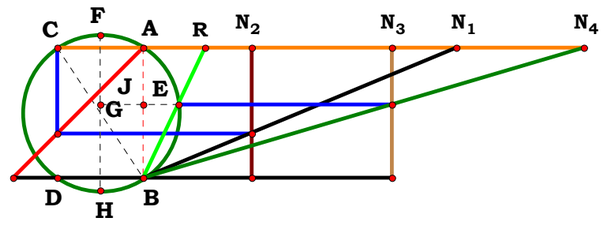
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left[\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot (A - B)\right]}{E \cdot \sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot E \cdot (A - B) + 2 \cdot B \cdot N_u \cdot (C - D)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left[V \cdot Y \cdot m \cdot n - \sqrt{Y^2 \cdot n^2 \cdot (V \cdot m - W \cdot l)^2 + 4 \cdot V^2 \cdot X \cdot m^2 \cdot o \cdot (Y \cdot n - X \cdot o)} - W \cdot Y \cdot l \cdot n\right]}{2 \cdot V \cdot X \cdot Z \cdot m \cdot o - p \cdot \sqrt{Y^2 \cdot n^2 \cdot (V \cdot m - W \cdot l)^2 + 4 \cdot V^2 \cdot X \cdot m^2 \cdot o \cdot (Y \cdot n - X \cdot o)} - Y \cdot n \cdot (2 \cdot V \cdot Z \cdot m - V \cdot m \cdot p + W \cdot l \cdot p)} = 0$$

4RST2AB1R4



$N_1 = 2.39948$
$N_2 = 0.83038$
$N_3 = 1.91023$
$N_4 = 3.38011$
$R = 0.47225$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .83038$ $N_3 := 1.91023$ $N_4 := 3.38011$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

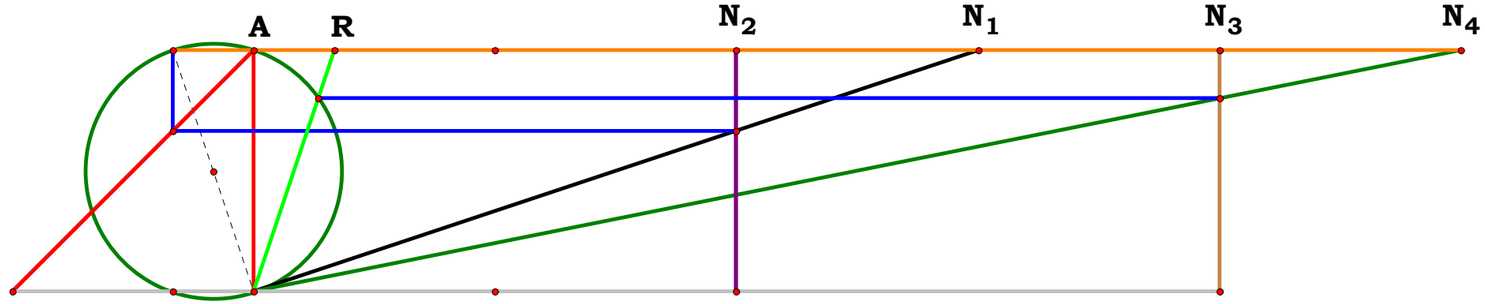
Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad AE := \frac{N_4 - N_3}{N_4} \qquad BE := AB - AE$$

$$FH := \sqrt{AB^2 + AC^2} \qquad FG := AE + \frac{FH - AB}{2}$$

$$EG := \sqrt{FG \cdot (FH - FG)} \qquad EJ := EG - \frac{AC}{2} \qquad R := \frac{EJ \cdot AB}{BE}$$

$R = 0.472254$



Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_2 \cdot N_4 - N_1 \cdot N_4 + \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot N_3} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot (A - B)}{2 \cdot B \cdot D} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

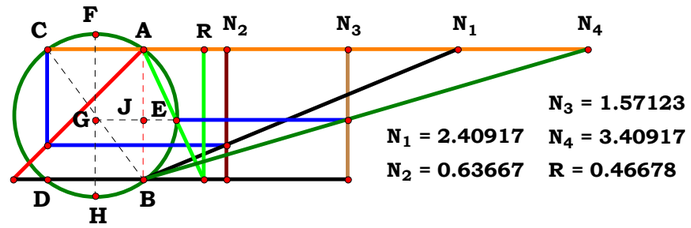
$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot (4 \cdot Y \cdot Z \cdot o \cdot p - 4 \cdot Y^2 \cdot p^2 + Z^2 \cdot o^2) + X \cdot Z^2 \cdot m \cdot o^2 \cdot (X \cdot m - 2 \cdot W \cdot n)} - Z \cdot o \cdot (W \cdot n - X \cdot m)}{2 \cdot W \cdot Y \cdot n \cdot p} = 0$$

B

$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.33333$

$$\frac{(N_2 \cdot N_4 - N_1 \cdot N_4) + \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot N_3} - R = 0.00000$$

4RST2AB1R5



$N_3 = 1.57123$
$N_1 = 2.40917$ $N_4 = 3.40917$
$N_2 = 0.63667$ $R = 0.46678$

Unit. $AB := 1$ **Given.** $N_1 := 2.40917$ $N_2 := .63667$ $N_3 := 1.57123$ $N_4 := 3.40917$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

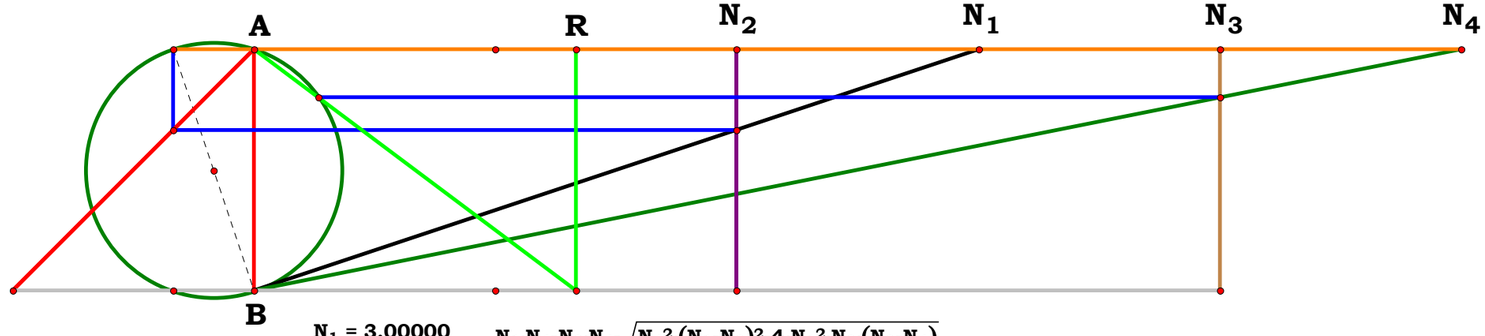
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $AJ := \frac{N_4 - N_3}{N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AJ + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{AJ}$ $R = 0.466776$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 1.33333$

$\frac{N_1 \cdot N_4 - N_2 \cdot N_4 - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_1 \cdot N_4 - N_2 \cdot N_4 - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot (N_3 - N_4)} = 0$$

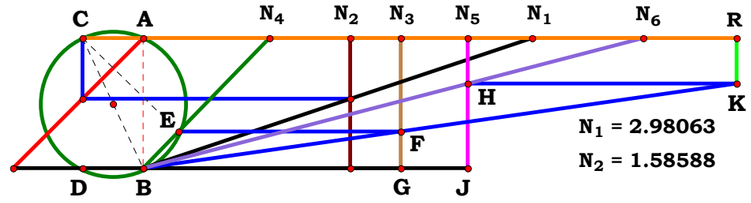
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot (A - B)}{2 \cdot B \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2 \cdot o^2 \cdot (W \cdot n - X \cdot m)^2 + 4 \cdot W^2 \cdot Y \cdot n^2 \cdot p \cdot (Z \cdot o - Y \cdot p)} - Z \cdot o \cdot (W \cdot n - X \cdot m)}{2 \cdot W \cdot n \cdot (Z \cdot o - Y \cdot p)} = 0$$

4RST2AB1R6



$N_3 = 1.97804$
$N_4 = 0.96835$
$N_5 = 2.48925$
$N_6 = 3.83557$
$R = 4.54856$

$N_1 = 2.98063$
$N_2 = 1.58588$

Unit. $AB := 1$ Given. $N_1 := 2.98063$ $N_2 := 1.58588$ $N_3 := 1.97804$

$N_4 := .96835$ $N_5 := 2.48925$ $N_6 := 3.83557$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

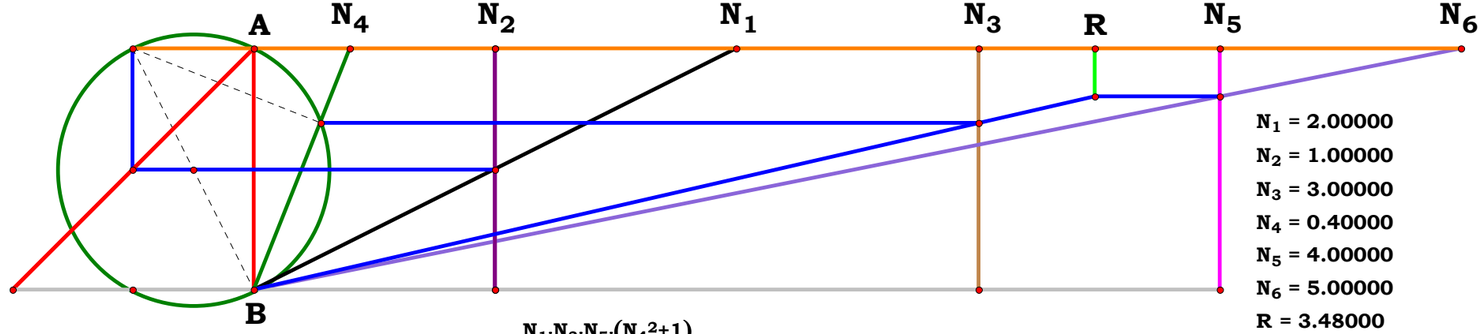
$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

$AC := \frac{N_1 - N_2}{N_1}$ $HN_5 := \frac{N_6 - N_5}{N_6}$ $HJ := AB - HN_5$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $CN_4 := N_4 + AC$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BE := BN_4 - EN_4$

$FG := \frac{AB \cdot BE}{BN_4}$ $R := \frac{N_3 \cdot HJ}{FG}$ $R = 4.548568$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 0.40000$
$N_5 = 4.00000$
$N_6 = 5.00000$
$R = 3.48000$

$\frac{N_1 \cdot N_3 \cdot N_5 \cdot (N_4^2+1)}{N_6 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 - AC \cdot N_4 \cdot N_6} = 0$$

$$R - \frac{N_1 \cdot N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 \cdot \left(N_1 - N_1 \cdot N_4 + N_2 \cdot N_4\right)} = 0$$

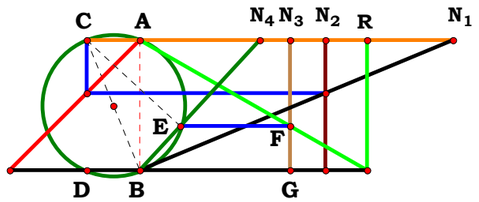
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{B \cdot F \cdot N_u \cdot \left(D^2 + N_u^2\right)}{C \cdot D \cdot E \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right)} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{U \cdot W \cdot Y \cdot l \cdot p \cdot \left(X^2 + n^2\right)}{U \cdot Z \cdot l \cdot m \cdot n \cdot o \cdot (n - X) + V \cdot X \cdot Z \cdot k \cdot m \cdot n \cdot o} = 0$$

4RST2AB1R7



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.15474$
$N_4 = 0.91992$
$R = 1.74563$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.15474$ $N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad CN_4 := N_4 + AC$$

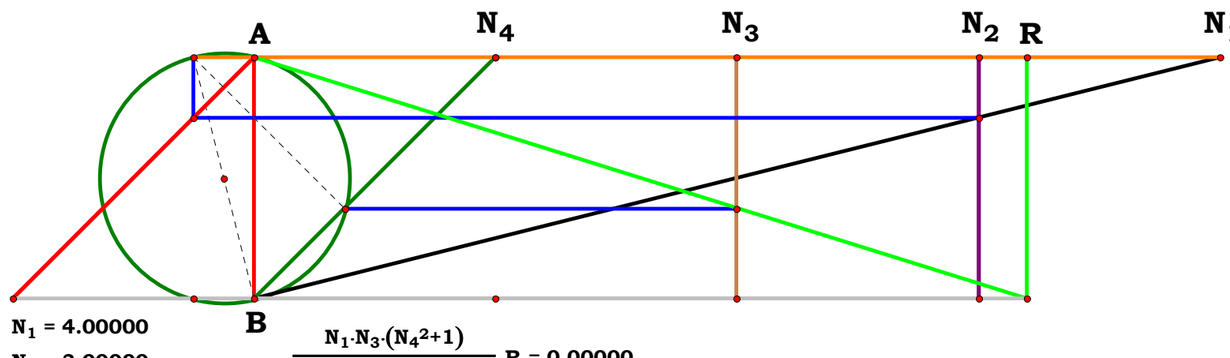
$$BN_4 := \sqrt{N_4^2 + AB^2} \qquad EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$$

$$FN_3 := \frac{AB \cdot EN_4}{BN_4} \qquad R := \frac{N_3 \cdot AB}{FN_3}$$

$R = 1.745632$

Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(AC + N_4\right)} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 1.00000$
$R = 3.20000$

$$\frac{N_1 \cdot N_3 \cdot (N_4^2+1)}{N_4 \cdot ((N_1-N_2)+N_1 \cdot N_4)} - R = 0.00000$$

$$R - \frac{N_1 \cdot N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(N_1 - N_2 + N_1 \cdot N_4\right)} = 0$$

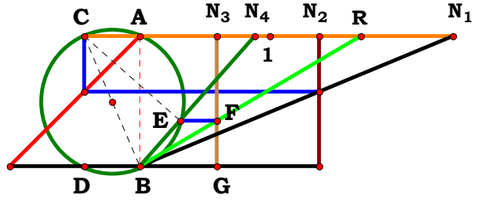
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{B \cdot \left(D^2 + N_u^2\right)}{C \cdot D \cdot (B - A) + B \cdot C \cdot N_u} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Y \cdot n \cdot \left(Z^2 + p^2\right)}{W \cdot Z \cdot n \cdot o \cdot (Z + p) - X \cdot Z \cdot m \cdot o \cdot p} = 0$$

4RST2AB1R8



$N_1 = 2.39948$
$N_2 = 1.37279$
$N_3 = 0.59297$
$N_4 = 0.88118$
$R = 1.69095$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.37279$ $N_3 := .59297$ $N_4 := .88118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_4 := N_4 + AC$

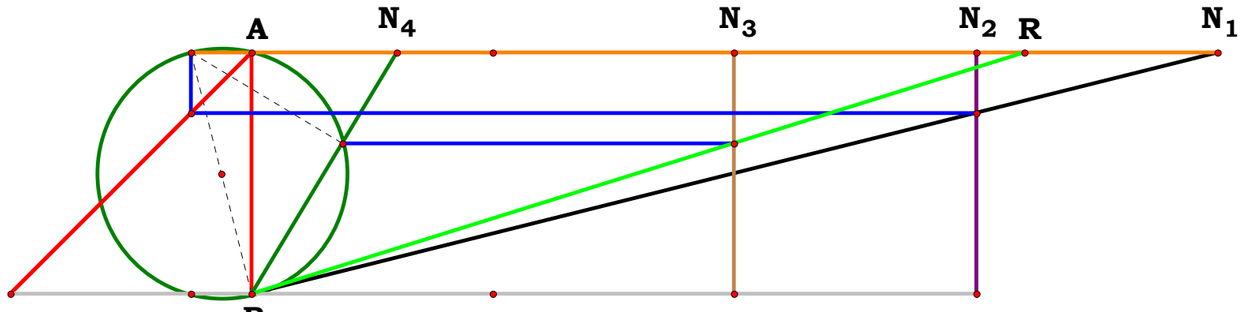
$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $R := \frac{N_3 \cdot BN_4}{BE}$

$R = 1.690955$

Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{1 - AC \cdot N_4} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 0.60000$
$R = 3.20000$

$\frac{N_1 \cdot N_3 \cdot (N_4^2+1)}{(N_1 - N_1 \cdot N_4) + N_2 \cdot N_4} - R = 0.00000$

$$R - \frac{N_1 \cdot N_3 \cdot \left(N_4^2 + 1\right)}{N_1 - N_1 \cdot N_4 + N_2 \cdot N_4} = 0$$

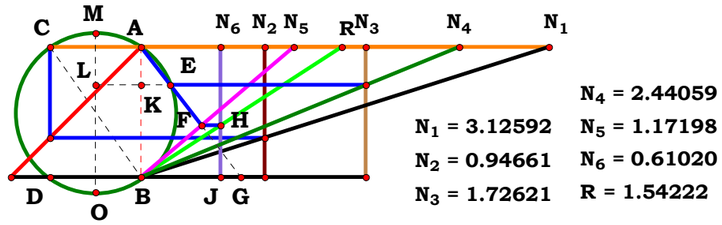
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot N_u \cdot \left(D^2 + N_u^2\right)}{B \cdot C \cdot D^2 + C \cdot D \cdot N_u \cdot (A - B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot n \cdot \left(Z^2 + p^2\right)}{W \cdot n \cdot o \cdot p \cdot (p - Z) + X \cdot Z \cdot m \cdot o \cdot p} = 0$$

4RST2AB1R9



$N_1 = 3.12592$ $N_2 = 0.94661$ $N_3 = 1.72621$ $N_4 = 2.44059$ $N_5 = 1.17198$ $N_6 = 0.61020$ $R = 1.54222$

Unit. $AB := 1$ **Given.** $N_1 := 3.12592$ $N_2 := .94661$ $N_3 := 1.72621$ $N_4 := 2.44059$ $N_5 := 1.17198$ $N_6 := .61020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

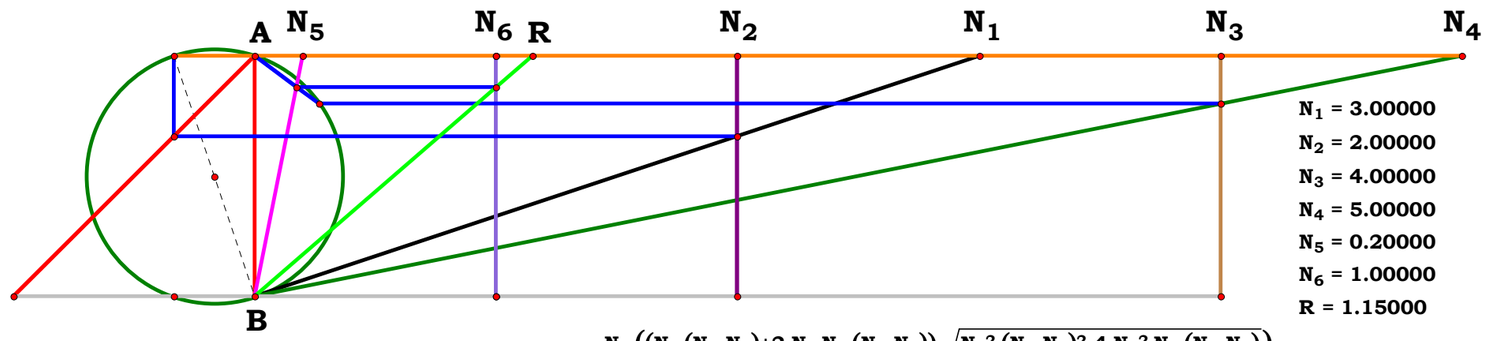
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $AK := \frac{N_4 - N_3}{N_4}$ $MO := \sqrt{AB^2 + AC^2}$

$ML := AK + \frac{MO - AB}{2}$ $EL := \sqrt{ML \cdot (MO - ML)}$

$EK := EL - \frac{AC}{2}$ $BG := \frac{EK \cdot AB}{AK}$ $HJ := \frac{BG}{BG + N_5}$

$R := \frac{N_6}{HJ}$ $R = 1.542204$



$N_1 = 3.00000$ $N_2 = 2.00000$ $N_3 = 4.00000$ $N_4 = 5.00000$ $N_5 = 0.20000$ $N_6 = 1.00000$ $R = 1.15000$

$\frac{N_6 \cdot ((N_4 \cdot (N_1 - N_2) + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4)) - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)})}{N_4 \cdot (N_1 - N_2) - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_4^2} \cdot (AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right]}{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)} = 0$$

$$R - \frac{N_6 \cdot \left[N_4 \cdot (N_1 - N_2) + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4) - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}\right]}{N_4 \cdot (N_1 - N_2) - \sqrt{N_4^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} = 0$$

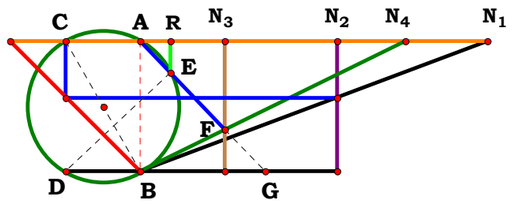
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[E \cdot \sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot E \cdot (A - B) + 2 \cdot B \cdot N_u \cdot (C - D)\right]}{E \cdot F \cdot \left[\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} + C \cdot (A - B)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[o \cdot \sqrt{X^2 \cdot m^2 \cdot (U \cdot l - V \cdot k)^2 + 4 \cdot U^2 \cdot W \cdot l^2 \cdot n \cdot (X \cdot m - W \cdot n)} - 2 \cdot U \cdot Y \cdot l \cdot (W \cdot n - X \cdot m) - X \cdot m \cdot o \cdot (U \cdot l - V \cdot k)\right]}{o \cdot p \cdot \left[\sqrt{X^2 \cdot m^2 \cdot (U \cdot l - V \cdot k)^2 + 4 \cdot U^2 \cdot W \cdot l^2 \cdot n \cdot (X \cdot m - W \cdot n)} - X \cdot m \cdot (U \cdot l - V \cdot k)\right]} = 0$$

4RST2AB2R0



$N_1 = 2.66100$
$N_2 = 1.50839$
$N_3 = 0.65108$
$N_4 = 2.03379$
$R = 0.22836$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := .65108$ $N_4 := 2.03379$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

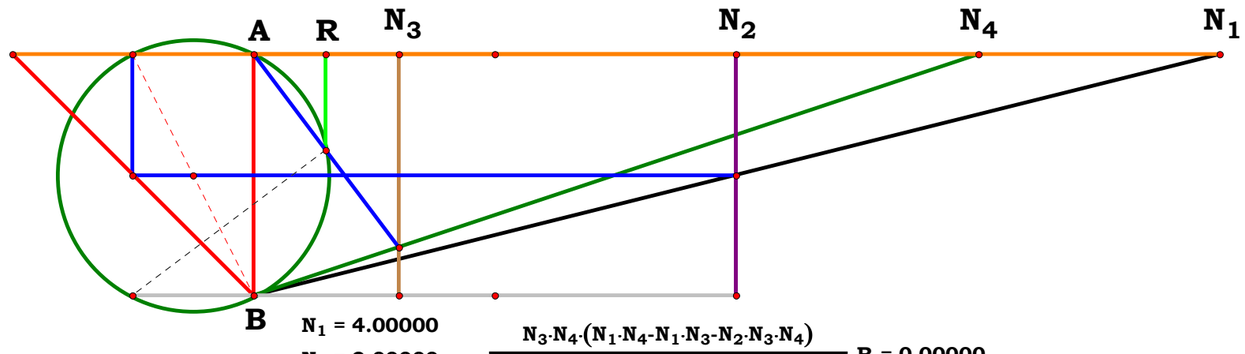
Descriptions.

$AC := \frac{N_2}{N_1}$ $FN_3 := \frac{N_4 - N_3}{N_4}$ $AF := \sqrt{N_3^2 + FN_3^2}$

$AG := \frac{AF \cdot AB}{FN_3}$ $BG := \frac{N_3 \cdot AB}{FN_3}$ $DG := BG + AC$

$EG := \frac{N_3 \cdot DG}{AF}$ $AE := AG - EG$

$R := \frac{N_3 \cdot AE}{AF}$ $R = 0.228362$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$N_4 = 3.00000$
$R = 0.30000$

$\frac{N_3 \cdot N_4 \cdot (N_1 \cdot N_4 - N_1 \cdot N_3 - N_2 \cdot N_3 \cdot N_4)}{N_1 \cdot (((N_3^2 \cdot N_4^2 + N_3^2) - 2 \cdot N_3 \cdot N_4) + N_4^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_4 - N_3 - AC \cdot N_3 \cdot N_4)}{N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 \cdot N_4 - N_1 \cdot N_3 - N_2 \cdot N_3 \cdot N_4)}{N_1 \cdot (N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2)} = 0$$

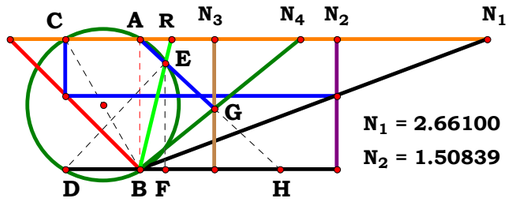
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [B \cdot (C - D) - A \cdot N_u]}{B \cdot [(C - D)^2 + N_u^2]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (W \cdot Z \cdot n \cdot o - W \cdot Y \cdot n \cdot p - X \cdot Y \cdot Z \cdot m)}{W \cdot n \cdot (Y^2 \cdot Z^2 + Y^2 \cdot p^2 - 2 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2)} = 0$$

4RST2AB2R1



Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := .57360$ $N_4 := 1.22987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

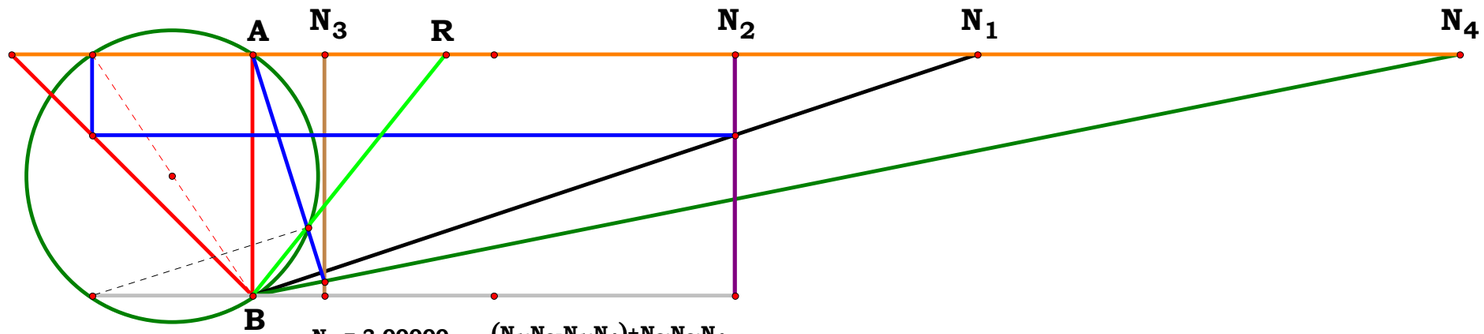
Descriptions.

$AC := \frac{N_2}{N_1}$ $GN_3 := \frac{N_4 - N_3}{N_4}$ $AG := \sqrt{N_3^2 + GN_3^2}$

$BH := \frac{N_3 \cdot AB}{GN_3}$ $DH := BH + AC$ $EH := \frac{N_3 \cdot DH}{AG}$

$FH := \frac{N_3 \cdot EH}{AG}$ $BF := BH - FH$

$EF := \frac{AB \cdot FH}{BH}$ $R := \frac{BF \cdot AB}{EF}$ $R = 0.237951$



Definitions.

$$R - \frac{N_4 - N_3 - AC \cdot N_3 \cdot N_4}{AC \cdot N_4 - AC \cdot N_3 + N_3 \cdot N_4} = 0$$

$$R - \frac{N_1 \cdot N_3 - N_1 \cdot N_4 + N_2 \cdot N_3 \cdot N_4}{N_2 \cdot N_3 - N_2 \cdot N_4 - N_1 \cdot N_3 \cdot N_4} = 0$$

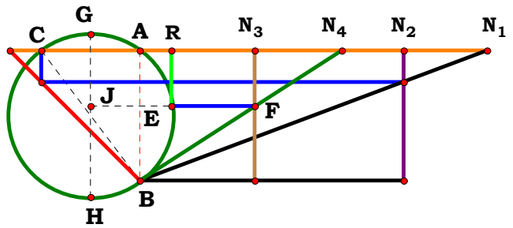
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot (C - D) - A \cdot N_u}{A \cdot (C - D) + B \cdot N_u} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot o - W \cdot Y \cdot n \cdot p - X \cdot Y \cdot Z \cdot m}{W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o} = 0$$

4RST2AB2R2



$N_1 = 2.66100$
$N_2 = 2.02174$
$N_3 = 0.88354$
$N_4 = 1.54950$
$R = 0.24412$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 2.02174$ $N_3 := .88354$ $N_4 := 1.54950$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

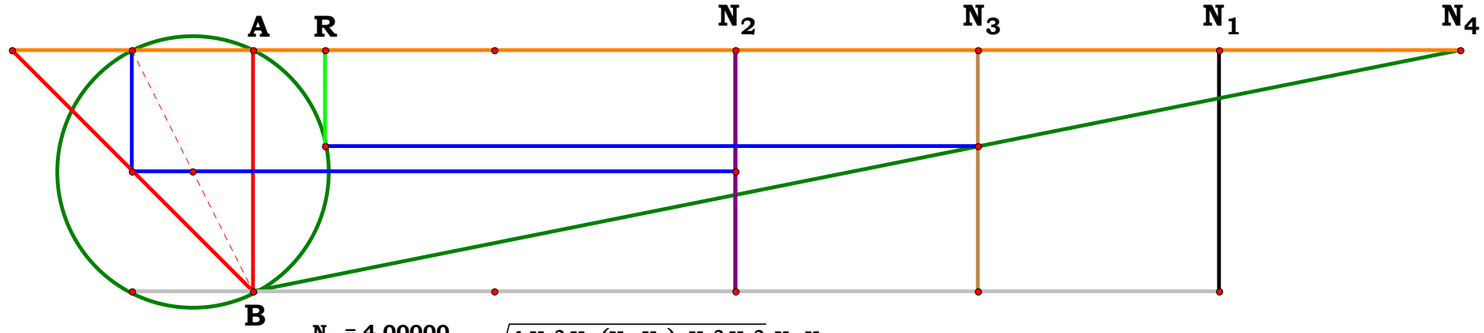
$$AC := \frac{N_2}{N_1} \qquad GH := \sqrt{AB^2 + AC^2}$$

$$GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2} \qquad EJ := \sqrt{GJ \cdot (GH - GJ)}$$

$$R := EJ - \frac{AC}{2} \qquad R = 0.244121$$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_4{}^2 - 4 \cdot N_3{}^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{N_4{}^2}}{2 \cdot \sqrt{N_4{}^2}} = 0$$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 5.00000$
$R = 0.30000$

$$\frac{\sqrt{4 \cdot N_1{}^2 \cdot N_3 \cdot (N_4 - N_3) + N_2{}^2 \cdot N_4{}^2} - N_2 \cdot N_4}{2 \cdot N_1 \cdot N_4} - R = 0.00000$$

$$R - \frac{\sqrt{4 \cdot N_1{}^2 \cdot N_3 \cdot (N_4 - N_3) + N_2{}^2 \cdot N_4{}^2} - N_2 \cdot N_4}{2 \cdot N_1 \cdot N_4} = 0$$

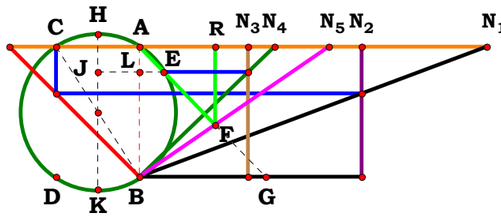
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot C} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{4 \cdot W^2 \cdot Y \cdot n^2 \cdot p \cdot (Z \cdot o - Y \cdot p) + X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot Z \cdot m \cdot o}{2 \cdot W \cdot Z \cdot n \cdot o} = 0$$

4RST2AB2R3



$N_1 = 2.66100$
$N_2 = 1.70210$
$N_3 = 0.83511$
$N_4 = 1.03615$
$N_5 = 1.45694$
$R = 0.58336$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.70210$ $N_3 := .83511$

$N_4 := 1.03615$ $N_5 := 1.45694$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

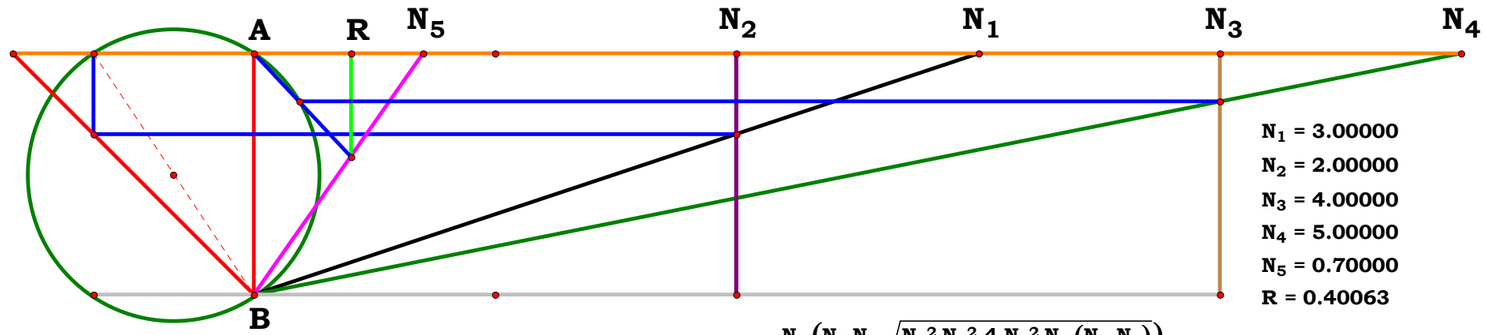
Descriptions.

$AC := \frac{N_2}{N_1}$ $HK := \sqrt{AB^2 + AC^2}$

$AL := \frac{N_4 - N_3}{N_4}$ $HJ := AL + \frac{HK - AB}{2}$

$EJ := \sqrt{HJ \cdot (HK - HJ)}$ $BG := \frac{\left(EJ - \frac{AC}{2}\right) \cdot AB}{AL}$

$R := \frac{N_5 \cdot BG}{N_5 + BG}$ $R = 0.583357$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 0.70000$
$R = 0.40063$

$$\frac{N_5 \cdot \left(N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}\right)}{\left(N_2 \cdot N_4 + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4)\right) - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}\right]}{N_2 \cdot N_4 + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4) - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} = 0$$

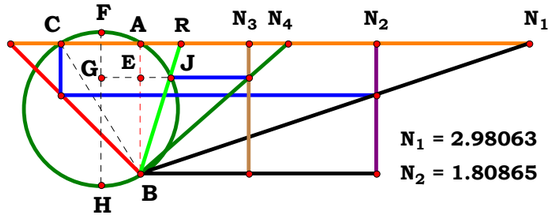
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)}\right]}{A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - 2 \cdot B \cdot N_u \cdot (C - D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[W \cdot Y \cdot l \cdot n - \sqrt{\left(4 \cdot V^2 \cdot X \cdot Y \cdot m^2 \cdot n \cdot o - 4 \cdot V^2 \cdot X^2 \cdot m^2 \cdot o^2 + W^2 \cdot Y^2 \cdot l^2 \cdot n^2\right)}\right]}{2 \cdot V \cdot Z \cdot m \cdot (X \cdot o - Y \cdot n) + W \cdot Y \cdot l \cdot n \cdot p - p \cdot \sqrt{4 \cdot V^2 \cdot X \cdot Y \cdot m^2 \cdot n \cdot o - 4 \cdot V^2 \cdot X^2 \cdot m^2 \cdot o^2 + W^2 \cdot Y^2 \cdot l^2 \cdot n^2}} = 0$$

4RST2AB2R4



$N_3 = 0.83511$
$N_4 = 1.13301$
$R = 0.31373$

$N_1 = 2.98063$
$N_2 = 1.80865$

Unit. $AB := 1$ **Given.** $N_1 := 2.98063$ $N_2 := 1.80865$ $N_3 := .83511$ $N_4 := 1.13301$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

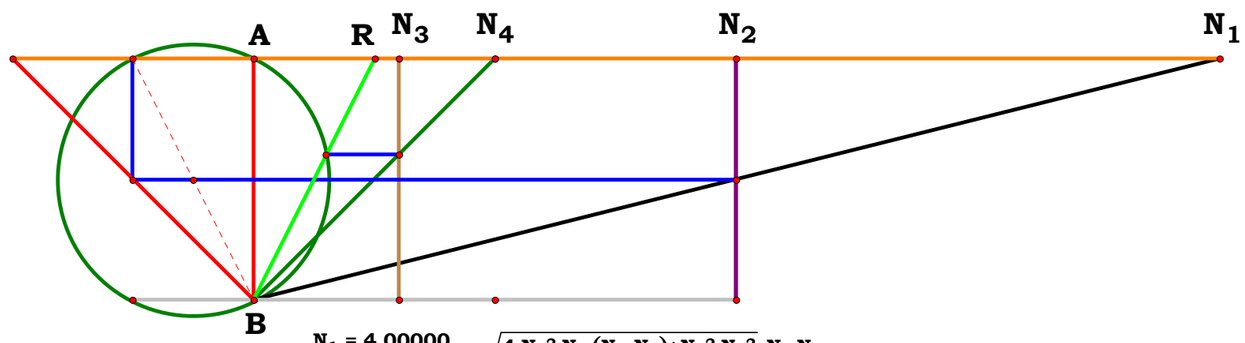
Descriptions.

$AC := \frac{N_2}{N_1}$ $AE := \frac{N_4 - N_3}{N_4}$ $BE := AB - AE$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AE + \frac{FH - AB}{2}$

$GJ := \sqrt{FG \cdot (FH - FG)}$ $EJ := GJ - \frac{AC}{2}$ $R := \frac{EJ}{BE}$

$R = 0.313738$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$N_4 = 1.00000$
$R = 0.50000$

$\frac{\sqrt{4 \cdot N_1^2 \cdot N_3 \cdot (N_4 - N_3) + N_2^2 \cdot N_4^2} - N_2 \cdot N_4}{2 \cdot N_1 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{\sqrt{4 \cdot N_1^2 \cdot N_3 \cdot (N_4 - N_3) + N_2^2 \cdot N_4^2} - N_2 \cdot N_4}{2 \cdot N_1 \cdot N_3} = 0$$

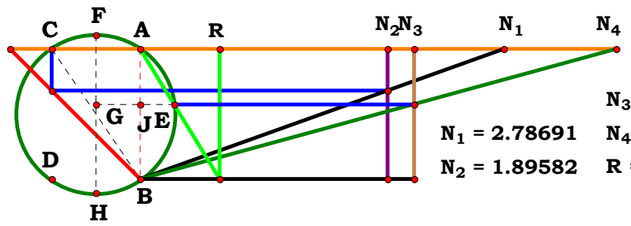
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot W^2 \cdot Y \cdot n^2 \cdot p \cdot (Z \cdot o - Y \cdot p) + X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot Z \cdot m \cdot o}{2 \cdot W \cdot Y \cdot n \cdot p} = 0$$

4RST2AB1R5



$N_3 = 2.10395$ $N_4 = 3.65131$

$N_1 = 2.78691$ $R = 0.61298$

$N_2 = 1.89582$

Unit. $AB := 1$ Given. $N_1 := 2.78691$ $N_2 := 1.89582$ $N_3 := 2.10395$ $N_4 := 3.65131$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

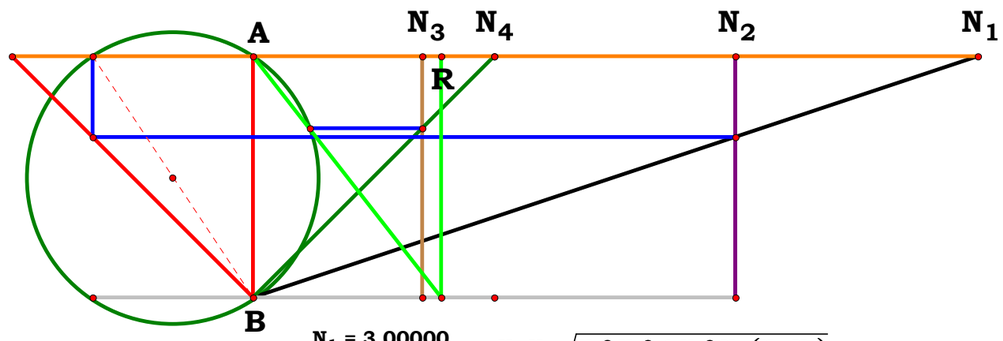
Descriptions.

$AC := \frac{N_2}{N_1}$ $AJ := \frac{N_4 - N_3}{N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AJ + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{AJ}$ $R = 0.612979$



$N_1 = 3.00000$

$N_2 = 2.00000$

$N_3 = 0.70000$

$N_4 = 1.00000$

$R = 0.77778$

$\frac{N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_1 \cdot (N_3 - N_4)} = 0$$

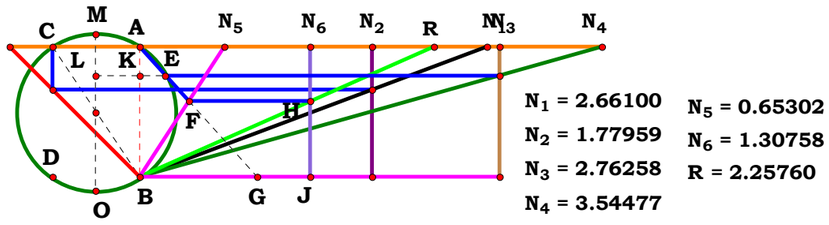
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Z \cdot m \cdot o - \sqrt{4 \cdot W^2 \cdot Y \cdot n^2 \cdot p \cdot (Z \cdot o - Y \cdot p) + X^2 \cdot Z^2 \cdot m^2 \cdot o^2}}{2 \cdot W \cdot n \cdot (Y \cdot p - Z \cdot o)} = 0$$

4RST2AB2R9



$N_1 = 2.66100$
$N_2 = 1.77959$
$N_3 = 2.76258$
$N_4 = 3.54477$
$N_5 = 0.65302$
$N_6 = 1.30758$
$R = 2.25760$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.77959$ $N_3 := 2.76258$ $N_4 := 3.54477$ $N_5 := .65302$ $N_6 := 1.30758$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

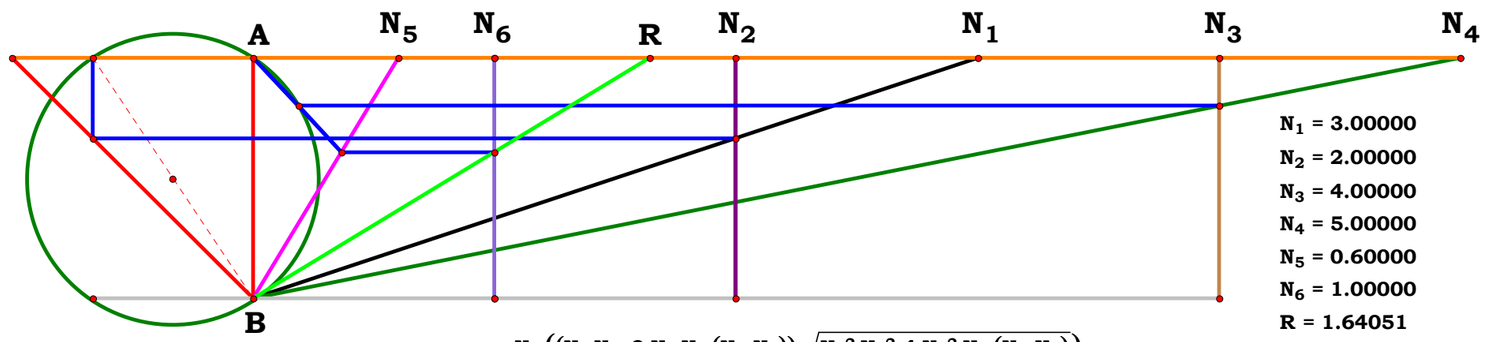
Descriptions.

$AC := \frac{N_2}{N_1}$ $AK := \frac{N_4 - N_3}{N_4}$ $MO := \sqrt{AB^2 + AC^2}$

$ML := AK + \frac{MO - AB}{2}$ $EL := \sqrt{ML \cdot (MO - ML)}$

$EK := EL - \frac{AC}{2}$ $BG := \frac{EK \cdot AB}{AK}$ $HJ := \frac{BG}{BG + N_5}$

$R := \frac{N_6}{HJ}$ $R = 2.257605$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 0.60000$
$N_6 = 1.00000$
$R = 1.64051$

$$\frac{N_6 \cdot \left((N_2 \cdot N_4 + 2 \cdot N_1 \cdot N_5 \cdot (N_3 - N_4)) - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}\right)}{N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right]}{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)} = 0$$

$$R - \frac{N_6 \cdot \left[N_2 \cdot N_4 + 2 \cdot N_1 \cdot N_5 \cdot \left(N_3 - N_4\right) - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot \left(N_3 - N_4\right)}\right]}{N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_1^2 \cdot N_3 \cdot \left(N_3 - N_4\right)}} = 0$$

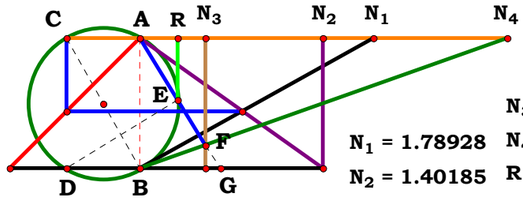
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - 2 \cdot B \cdot N_u \cdot (C - D)\right]}{E \cdot F \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)}\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[2 \cdot U \cdot Y \cdot l \cdot (W \cdot n - X \cdot m) + V \cdot X \cdot k \cdot m \cdot o - o \cdot \sqrt{4 \cdot U^2 \cdot W \cdot l^2 \cdot n \cdot (X \cdot m - W \cdot n) + V^2 \cdot X^2 \cdot k^2 \cdot m^2}\right]}{o \cdot p \cdot \left[V \cdot X \cdot k \cdot m - \sqrt{4 \cdot U^2 \cdot W \cdot l^2 \cdot n \cdot (X \cdot m - W \cdot n) + V^2 \cdot X^2 \cdot k^2 \cdot m^2}\right]} = 0$$

4RST2AB3R0



$N_3 = 0.50580$ $N_4 = 2.81833$ $R = 0.29230$

$N_1 = 1.78928$ $N_2 = 1.40185$

Unit. $AB := 1$ Given. $N_1 := 1.78926$ $N_2 := 1.40185$ $N_3 := .50580$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

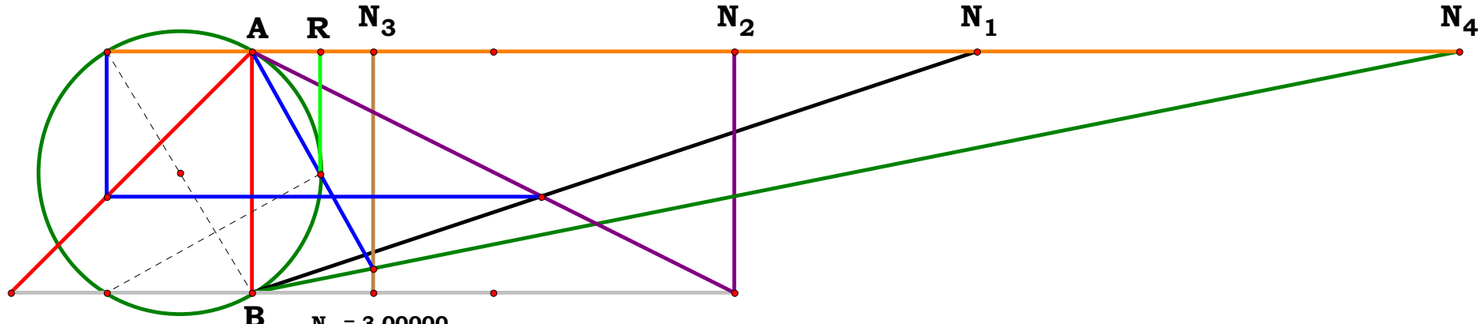
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $FN_3 := \frac{N_4 - N_3}{N_4}$ $AF := \sqrt{N_3^2 + FN_3^2}$

$AG := \frac{AF \cdot AB}{FN_3}$ $BG := \frac{N_3 \cdot AB}{FN_3}$ $DG := BG + AC$

$EG := \frac{N_3 \cdot DG}{AF}$ $AE := AG - EG$

$R := \frac{N_3 \cdot AE}{AF}$ $R = 0.292301$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.50000$
$N_4 = 5.00000$
$R = 0.28302$

$\frac{N_3 \cdot N_4 \cdot (N_4 \cdot (N_1 + N_2) - N_3 \cdot (N_1 + N_2 + N_1 \cdot N_4))}{(N_1 + N_2) \cdot ((N_3^2 \cdot (N_4^2 + 1) - 2 \cdot N_3 \cdot N_4) + N_4^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_4 - N_3 - AC \cdot N_3 \cdot N_4)}{N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot [N_4 \cdot (N_1 + N_2) - N_3 \cdot (N_1 + N_2 + N_1 \cdot N_4)]}{(N_1 + N_2) \cdot [N_3^2 \cdot (N_4^2 + 1) - 2 \cdot N_3 \cdot N_4 + N_4^2]} = 0$$

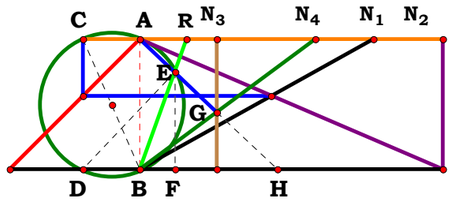
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [(C - D) \cdot (A + B) - B \cdot N_u]}{(A + B) \cdot [(C - D)^2 + N_u^2]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot [W \cdot n \cdot (Z \cdot o - Y \cdot p - Y \cdot Z) + X \cdot m \cdot (Z \cdot o - Y \cdot p)]}{(W \cdot n + X \cdot m) \cdot (Y^2 \cdot Z^2 + Y^2 \cdot p^2 - 2 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2)} = 0$$

4RST2AB3R1



$N_1 = 1.78928$
$N_2 = 2.32200$
$N_3 = 0.59297$
$N_4 = 1.34610$
$R = 0.36035$

Unit. $AB := 1$ Given. $N_1 := 1.78929$ $N_2 := 2.32200$ $N_3 := .59297$ $N_4 := 1.3461$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

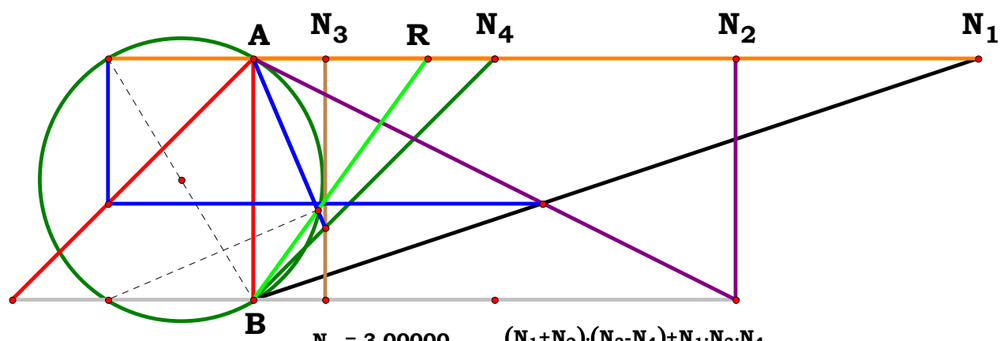
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $GN_3 := \frac{N_4 - N_3}{N_4}$ $AG := \sqrt{N_3^2 + GN_3^2}$

$BH := \frac{N_3 \cdot AB}{GN_3}$ $DH := BH + AC$ $EH := \frac{N_3 \cdot DH}{AG}$

$FH := \frac{N_3 \cdot EH}{AG}$ $BF := BH - FH$ $EF := \frac{AB \cdot FH}{BH}$

$R := \frac{BF \cdot AB}{EF}$ $R = 0.360351$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.30000$
$N_4 = 1.00000$
$x_R = 0.72222$

$\frac{(N_1+N_2)\cdot(N_3-N_4)+N_1\cdot N_3\cdot N_4}{N_1\cdot(N_3-N_4)-N_3\cdot N_4\cdot(N_1+N_2)} - x_R = 0.00000$

Definitions.

$R - \frac{N_4 - N_3 - AC \cdot N_3 \cdot N_4}{AC \cdot N_4 - AC \cdot N_3 + N_3 \cdot N_4} = 0$

$R - \frac{(N_3 - N_4) \cdot (N_1 + N_2) + N_1 \cdot N_3 \cdot N_4}{N_1 \cdot (N_3 - N_4) - N_3 \cdot N_4 \cdot (N_1 + N_2)} = 0$

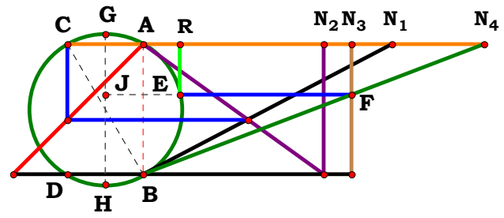
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{(C - D) \cdot (A + B) - B \cdot N_u}{B \cdot (C - D) + N_u \cdot (A + B)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot n \cdot (Z \cdot o - Y \cdot p - Y \cdot Z) + X \cdot m \cdot (Z \cdot o - Y \cdot p)}{W \cdot n \cdot (Y \cdot Z - Y \cdot p + Z \cdot o) + X \cdot Y \cdot Z \cdot m} = 0$

4RST2AB3R2



$N_1 = 1.90551$
$N_2 = 1.38247$
$N_3 = 1.60029$
$N_4 = 2.61493$
$R = 0.27718$

Unit. $AB := 1$ Given. $N_1 := 1.90551$ $N_2 := 1.38247$ $N_3 := 1.60029$ $N_4 := 2.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

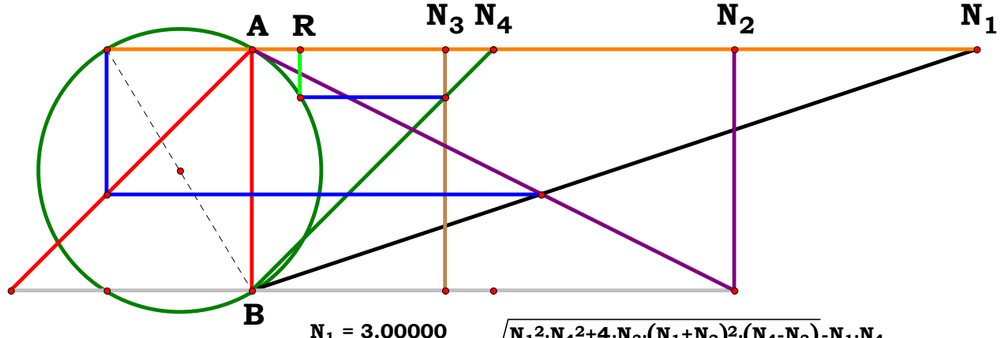
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $GH := \sqrt{AB^2 + AC^2}$

$GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2}$

$EJ := \sqrt{GJ \cdot (GH - GJ)}$ $R := EJ - \frac{AC}{2}$

$R = 0.277175$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.80000$
$N_4 = 1.00000$
$R = 0.20000$

$\frac{\sqrt{N_1^2 \cdot N_4^2 + 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3)} - N_1 \cdot N_4}{2 \cdot N_4 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_4^{\,2} - 4 \cdot N_3^{\,2} + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{N_4^{\,2}}}{2 \cdot \sqrt{N_4^{\,2}}} = 0$$

$$R - \frac{\sqrt{N_1^{\,2} \cdot N_4^{\,2} + 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3)} - N_1 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_4} = 0$$

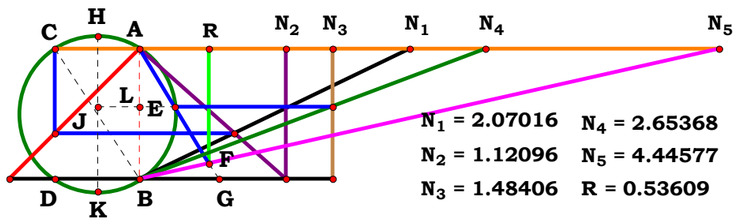
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - B \cdot C}{2 \cdot (A + B) \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot o^2 \cdot Z^2 + 4 \cdot Z \cdot Y \cdot o \cdot p \cdot (W \cdot n + X \cdot m)^2 - \left[4 \cdot Y^2 \cdot p^2 \cdot (W \cdot n + X \cdot m)^2\right]} - W \cdot Z \cdot n \cdot o}{2 \cdot Z \cdot o \cdot (W \cdot n + X \cdot m)} = 0$$

4RST2AB3R3



Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := 1.12096$ $N_3 := 1.48406$

$N_4 := 2.65368$ $N_5 := 4.44577$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

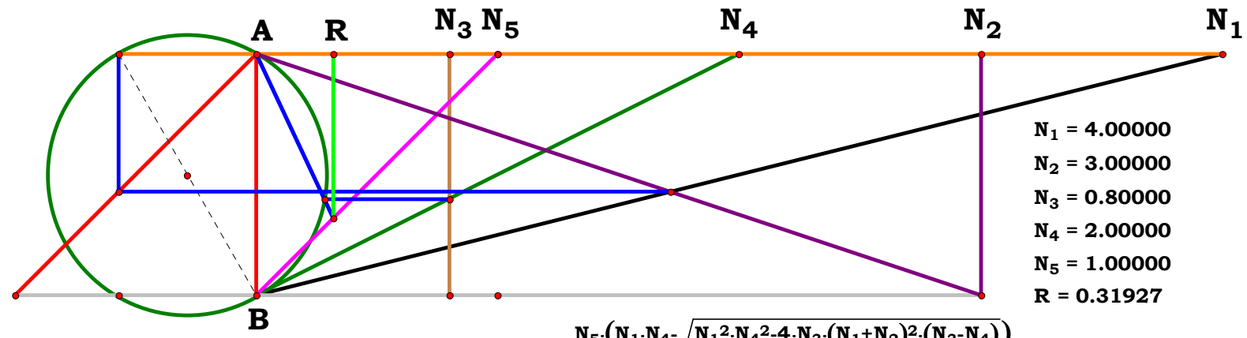
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $HK := \sqrt{AB^2 + AC^2}$

$AL := \frac{N_4 - N_3}{N_4}$ $HJ := AL + \frac{HK - AB}{2}$

$EJ := \sqrt{HJ \cdot (HK - HJ)}$ $BG := \frac{\left(EJ - \frac{AC}{2}\right) \cdot AB}{AL}$

$R := \frac{N_5 \cdot BG}{N_5 + BG}$ $R = 0.536087$



$\frac{N_5 \cdot \left(N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}\right)}{(N_1 \cdot N_4 + 2 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3 - N_4)) - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}} - R = 0.00000$

Definitions.

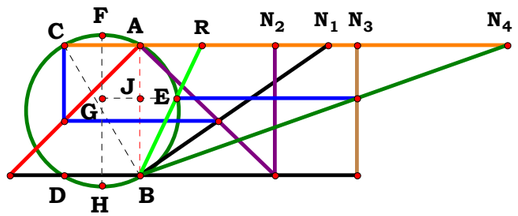
$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_3 - N_4) \cdot (N_1 + N_2)^2}\right]}{N_1 \cdot N_4 + 2 \cdot N_5 \cdot (N_3 - N_4) \cdot (N_1 + N_2) - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_3 - N_4) \cdot (N_1 + N_2)^2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left[\sqrt{B^2 \cdot C^2 - 4 \cdot D^2 \cdot (A + B)^2 + 4 \cdot C \cdot D \cdot (A + B)^2} - B \cdot C\right]}{E \cdot \sqrt{B^2 \cdot C^2 - 4 \cdot D^2 \cdot (A + B)^2 + 4 \cdot C \cdot D \cdot (A + B)^2} + 2 \cdot N_u \cdot (C - D) \cdot (A + B) - B \cdot C \cdot E} = 0 \qquad N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left[V \cdot Y \cdot m \cdot n - \sqrt{4 \cdot X \cdot o \cdot (V \cdot m + W \cdot l)^2 \cdot (Y \cdot n - X \cdot o) + V^2 \cdot Y^2 \cdot m^2 \cdot n^2}\right]}{2 \cdot Z \cdot (X \cdot o - Y \cdot n) \cdot (V \cdot m + W \cdot l) + V \cdot Y \cdot m \cdot n \cdot p - p \cdot \sqrt{4 \cdot X \cdot o \cdot (V \cdot m + W \cdot l)^2 \cdot (Y \cdot n - X \cdot o) + V^2 \cdot Y^2 \cdot m^2 \cdot n^2}} = 0$$

4RST2AB3R4



$N_1 = 1.44059$
$N_2 = 1.03379$
$N_3 = 1.66809$
$N_4 = 2.81833$
$R = 0.47329$

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := 1.03379$ $N_3 := 1.66809$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

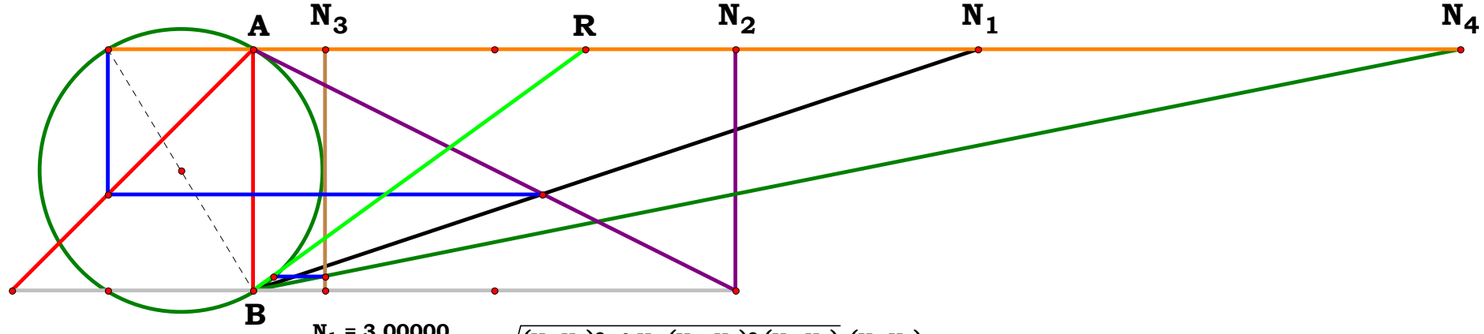
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $AE := \frac{N_4 - N_3}{N_4}$ $BE := AB - AE$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AE + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{BE}$ $R = 0.473287$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.30000$
$N_4 = 5.00000$
$R = 1.37704$

$\frac{\sqrt{(N_1 \cdot N_4)^2 + 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3)} - (N_1 \cdot N_4)}{2 \cdot N_3 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{\sqrt{(N_1 \cdot N_4)^2 + 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3)} - N_1 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_3} = 0$$

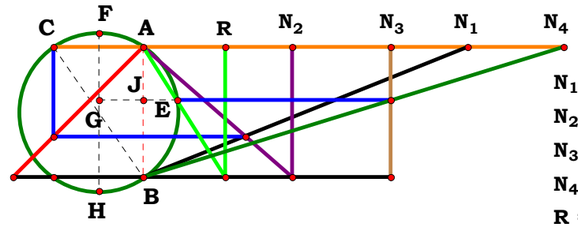
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - B \cdot C}{2 \cdot (A + B) \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)^2 \cdot (Z \cdot o - Y \cdot p) + W^2 \cdot Z^2 \cdot n^2 \cdot o^2} - W \cdot Z \cdot n \cdot o}{2 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)} = 0$$

4RST2AB3R5



$N_1 = 2.48665$
$N_2 = 1.14033$
$N_3 = 1.90055$
$N_4 = 3.22514$
$R = 0.62530$

Unit. $AB := 1$ **Given.** $N_1 := 2.48665$ $N_2 := 1.14033$ $N_3 := 1.90055$ $N_4 := 3.22514$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

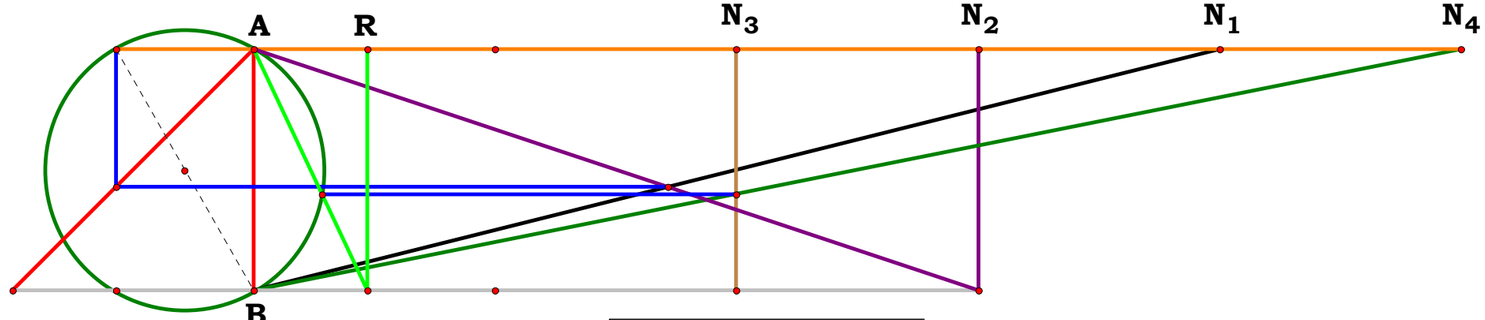
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $AJ := \frac{N_4 - N_3}{N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AJ + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{AJ}$ $R = 0.625301$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 5.00000$
$R = 0.46902$

$\frac{(N_1 \cdot N_4) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}}{2 \cdot (N_1 + N_2) \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}}{2 \cdot (N_1 + N_2) \cdot (N_3 - N_4)} = 0$$

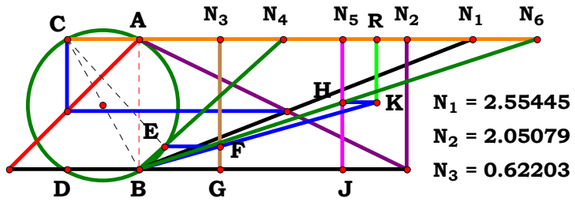
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - B \cdot C}{2 \cdot (A + B) \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot o - \sqrt{4 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)^2 \cdot (Z \cdot o - Y \cdot p) + W^2 \cdot Z^2 \cdot n^2 \cdot o^2}}{2 \cdot (W \cdot n + X \cdot m) \cdot (Y \cdot p - Z \cdot o)} = 0$$

4RST2AB3R6



$N_1 = 2.55445$ $N_4 = 1.10395$
$N_2 = 2.05079$ $N_5 = 1.55941$
$N_3 = 0.62203$ $N_6 = 3.05208$
$R = 1.81897$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := 2.05079$ $N_3 := .62203$
$N_4 := 1.10395$ $N_5 := 1.55941$ $N_6 := 3.05208$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

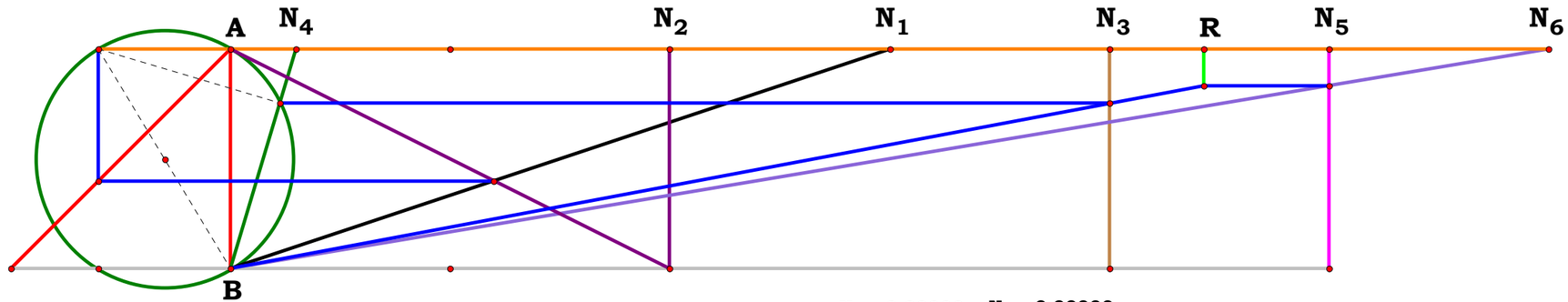
$AC := \frac{N_1}{N_1 + N_2}$ $HN_5 := \frac{N_6 - N_5}{N_6}$

$HJ := AB - HN_5$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$CN_4 := N_4 + AC$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $FG := \frac{AB \cdot BE}{BN_4}$

$R := \frac{N_3 \cdot HJ}{FG}$ $R = 1.818978$



$N_1 = 3.00000$ $N_4 = 0.30000$
$N_2 = 2.00000$ $N_5 = 5.00000$
$N_3 = 4.00000$ $N_6 = 6.00000$
$R = 4.43089$

Definitions.

$R - \frac{N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 - AC \cdot N_4 \cdot N_6} = 0$

$\frac{N_3 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_6 \cdot ((N_1 + N_2) - N_1 \cdot N_4)} - R = 0.00000$

$R - \frac{N_3 \cdot N_5 \cdot \left(N_1 + N_2\right) \cdot \left(N_4^2 + 1\right)}{N_6 \cdot \left(N_1 + N_2 - N_1 \cdot N_4\right)} = 0$

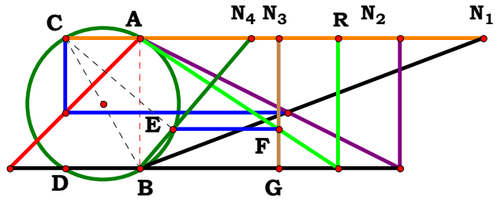
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$R - \frac{F \cdot N_u \cdot \left(D^2 + N_u^2\right) \cdot (A + B)}{\left[C \cdot D \cdot E \cdot \left[D \cdot (A + B) - B \cdot N_u\right]\right]} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Y \cdot p \cdot (U \cdot l + V \cdot k) \cdot \left(X^2 + n^2\right)}{Z \cdot m \cdot n \cdot o \cdot (U \cdot l \cdot n - U \cdot X \cdot l + V \cdot k \cdot n)} = 0$

4RST2AB3R7



$N_1 = 2.63194$
$N_2 = 1.99268$
$N_3 = 1.06757$
$N_4 = 0.85212$
$R = 1.52159$

Unit. $AB := 1$ Given. $N_1 := 2.63194$ $N_2 := 1.99268$ $N_3 := 1.06757$ $N_4 := .85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$FN_3 := \frac{AB \cdot EN_4}{BN_4}$ $R := \frac{N_3 \cdot AB}{FN_3}$

$R = 1.521591$

Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(AC + N_4\right)} = 0$$

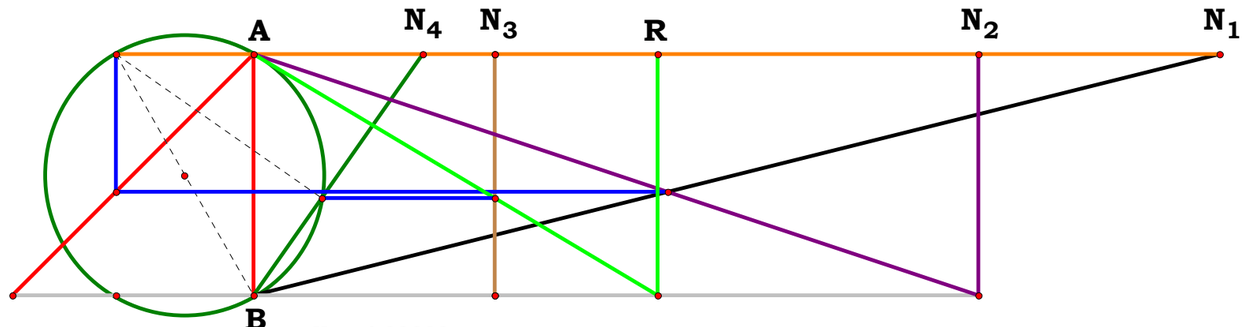
$$R - \frac{N_3 \cdot \left(N_1 + N_2\right) \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(N_1 + N_1 \cdot N_4 + N_2 \cdot N_4\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\left(D^2 + N_u^2\right) \cdot (A + B)}{C \cdot \left[B \cdot D + N_u \cdot (A + B)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

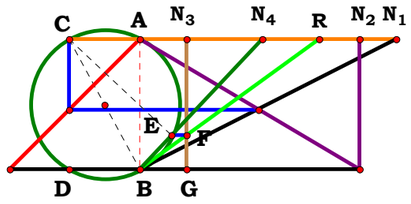
$$R - \frac{Y \cdot (W \cdot n + X \cdot m) \cdot \left(Z^2 + p^2\right)}{Z \cdot o \cdot (W \cdot Z \cdot n + X \cdot Z \cdot m + W \cdot n \cdot p)} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.70000$
$R = 1.67416$

$\frac{N_3 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_4 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4)} - R = 0.00000$

4RST2AB3R8



$N_1 = 1.96362$
$N_2 = 1.68273$
$N_3 = 0.36051$
$N_4 = 0.93929$
$R = 1.37315$

Unit. $AB := 1$ Given. $N_1 := 1.96362$ $N_2 := 1.68273$ $N_3 := .36051$ $N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

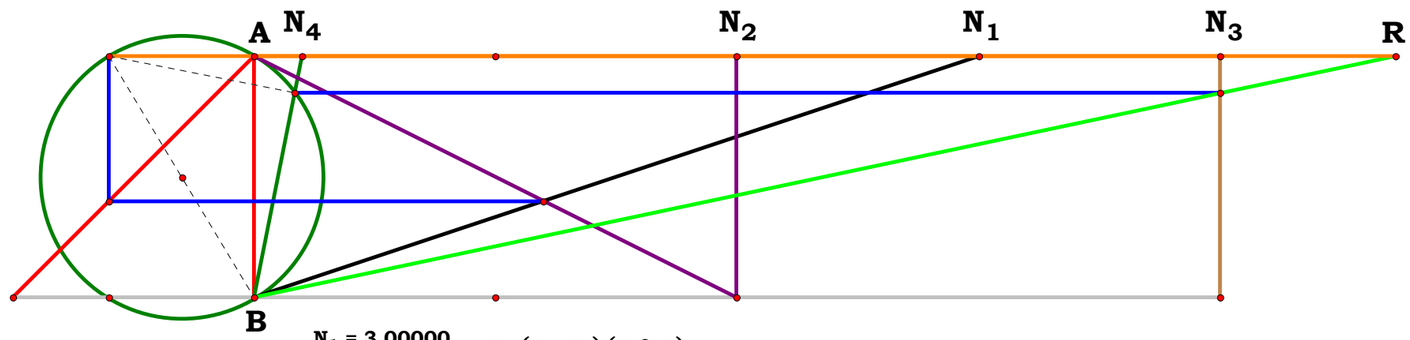
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_4 := N_4 + AC$$

$$BN_4 := \sqrt{N_4^2 + AB^2} \qquad EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$$

$$BE := BN_4 - EN_4 \qquad R := \frac{N_3 \cdot BN_4}{BE}$$

$R = 1.373144$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 0.20000$
$R = 4.72727$

$$\frac{N_3 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{(N_1 + N_2) - N_1 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{1 - AC \cdot N_4} = 0$$

$$R - \frac{N_3 \cdot (N_1 + N_2) \cdot \left(N_4^2 + 1\right)}{N_1 + N_2 - N_1 \cdot N_4} = 0$$

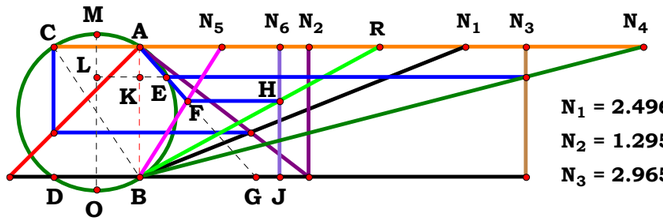
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot \left(D^2 + N_u^2\right) \cdot (A + B)}{C \cdot D \cdot \left[D \cdot (A + B) - B \cdot N_u\right]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot (W \cdot n + X \cdot m) \cdot \left(Z^2 + p^2\right)}{o \cdot p \cdot (W \cdot n \cdot p - W \cdot Z \cdot n + X \cdot m \cdot p)} = 0$$

4RST2AB3R9



$N_1 = 2.49634$ $N_2 = 1.29530$ $N_3 = 2.96599$ $N_4 = 3.86440$ $N_5 = 0.62958$ $N_6 = 1.07618$ $R = 1.83953$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 1.29530$ $N_3 := 2.96599$ $N_4 := 3.86440$ $N_5 := .62958$ $N_6 := 1.07618$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

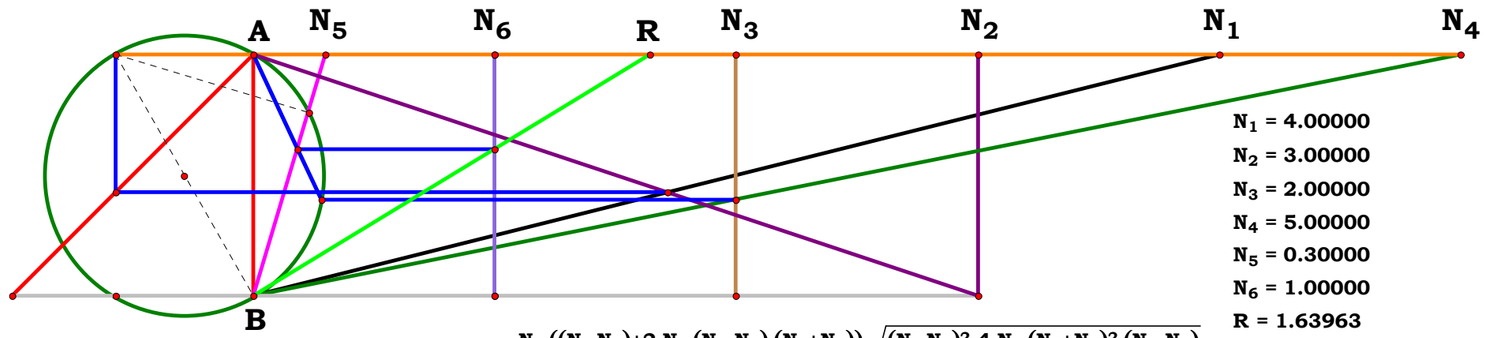
$AC := \frac{N_1}{N_1 + N_2}$ $AK := \frac{N_4 - N_3}{N_4}$

$MO := \sqrt{AB^2 + AC^2}$ $ML := AK + \frac{MO - AB}{2}$

$EL := \sqrt{ML \cdot (MO - ML)}$ $EK := EL - \frac{AC}{2}$

$BG := \frac{EK \cdot AB}{AK}$ $HJ := \frac{BG}{BG + N_5}$

$R := \frac{N_6}{HJ}$ $R = 1.839537$



$N_1 = 4.00000$ $N_2 = 3.00000$ $N_3 = 2.00000$ $N_4 = 5.00000$ $N_5 = 0.30000$ $N_6 = 1.00000$ $R = 1.63963$

$\frac{N_6 \cdot ((N_1 \cdot N_4) + 2 \cdot N_5 \cdot (N_3 - N_4) \cdot (N_1 + N_2)) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}}{(N_1 \cdot N_4) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_4^2} \cdot \left[AC \cdot N_4 + 2 \cdot N_5 \cdot (N_3 - N_4)\right] - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_3 - N_4)}\right]}{N_4 \cdot \left[AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_3 - N_4)}\right]} = 0$$

$$R - \frac{N_6 \cdot \left[N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)} + 2 \cdot N_5 \cdot (N_3 - N_4) \cdot (N_1 + N_2)\right]}{N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}} = 0$$

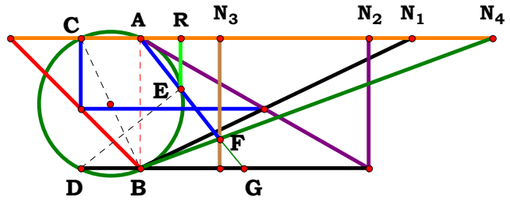
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} + \left[2 \cdot N_u \cdot (C - D) \cdot (A + B) - B \cdot C \cdot E\right]\right]}{E \cdot F \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - B \cdot C\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[X \cdot m \cdot (U \cdot l \cdot o - 2 \cdot V \cdot Y \cdot k - 2 \cdot U \cdot Y \cdot l) + 2 \cdot W \cdot Y \cdot n \cdot (U \cdot l + V \cdot k) - o \cdot \sqrt{U^2 \cdot l^2 \cdot m^2 \cdot X^2 + 4 \cdot W \cdot n \cdot (U \cdot l + V \cdot k)^2 \cdot (X \cdot m - W \cdot n)}\right]}{o \cdot p \cdot \left[U \cdot X \cdot l \cdot m - \sqrt{U^2 \cdot l^2 \cdot m^2 \cdot X^2 + 4 \cdot W \cdot n \cdot (U \cdot l + V \cdot k)^2 \cdot (X \cdot m - W \cdot n)}\right]} = 0$$

4RST2AB4R0



$N_1 = 2.07985$
$N_2 = 1.75053$
$N_3 = 0.61234$
$N_4 = 2.70210$
$R = 0.31057$

Unit. $AB := 1$ **Given.** $N_1 := 2.07985$ $N_2 := 1.75053$ $N_3 := .61234$ $N_4 := 2.70210$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

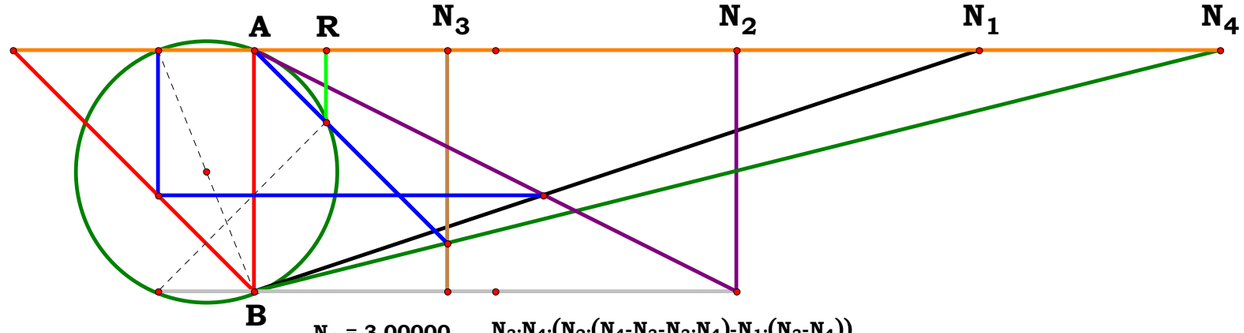
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $FN_3 := \frac{N_4 - N_3}{N_4}$ $AF := \sqrt{N_3^2 + FN_3^2}$

$AG := \frac{AF \cdot AB}{FN_3}$ $BG := \frac{N_3 \cdot AB}{FN_3}$ $DG := BG + AC$

$EG := \frac{N_3 \cdot DG}{AF}$ $AE := AG - EG$

$R := \frac{N_3 \cdot AE}{AF}$ $R = 0.310572$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.80000$
$N_4 = 4.00000$
$R = 0.30000$

$\frac{N_3 \cdot N_4 \cdot (N_2 \cdot (N_4 - N_3 - N_3 \cdot N_4) - N_1 \cdot (N_3 - N_4))}{(N_1 + N_2) \cdot ((N_4^2 + 1) \cdot N_3^2 - N_4 \cdot (2 \cdot N_3 - N_4))} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_4 \cdot (N_4 - N_3 - AC \cdot N_3 \cdot N_4)}{N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2} = 0$

$R - \frac{N_3 \cdot N_4 \cdot [N_2 \cdot (N_4 - N_3 - N_3 \cdot N_4) - N_1 \cdot (N_3 - N_4)]}{(N_1 + N_2) \cdot [(N_4^2 + 1) \cdot N_3^2 - N_4 \cdot (2 \cdot N_3 - N_4)]} = 0$

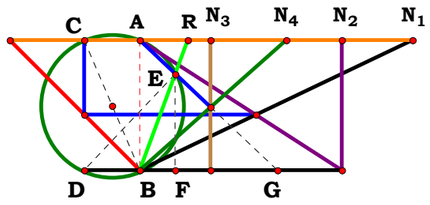
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot [(C - D) \cdot (A + B) - A \cdot N_u]}{(A + B) \cdot [(C - D)^2 + N_u^2]} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot [-W \cdot n \cdot (Y \cdot p - Z \cdot o) - X \cdot Y \cdot m \cdot (Z + p) + X \cdot Z \cdot m \cdot o]}{(W \cdot n + X \cdot m) \cdot (Y^2 \cdot Z^2 + Y^2 \cdot p^2 - 2 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2)} = 0$

4RST2AB4R1



$N_1 = 2.08954$
$N_2 = 1.54713$
$N_3 = 0.54454$
$N_4 = 1.12332$
$R = 0.37131$

Unit. $AB := 1$ **Given.** $N_1 := 2.08954$ $N_2 := 1.54713$ $N_3 := .54454$ $N_4 := 1.12332$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

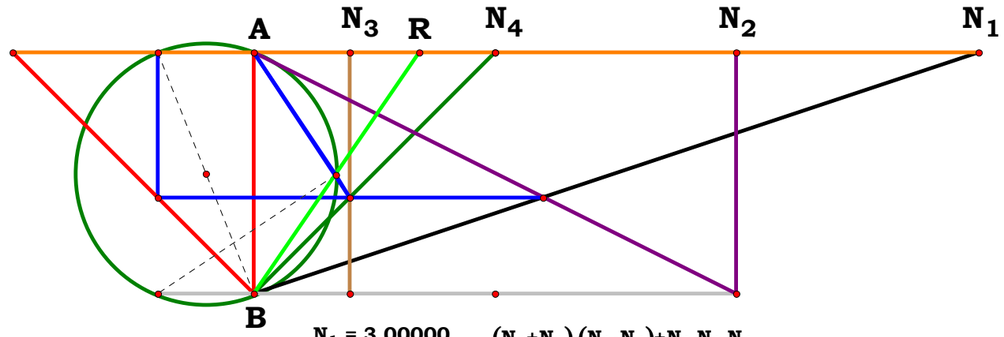
$AC := \frac{N_2}{N_1 + N_2}$ $GN_3 := \frac{N_4 - N_3}{N_4}$ $AG := \sqrt{N_3^{\,2} + GN_3^{\,2}}$

$BH := \frac{N_3 \cdot AB}{GN_3}$ $DH := BH + AC$ $EH := \frac{N_3 \cdot DH}{AG}$

$FH := \frac{N_3 \cdot EH}{AG}$ $BF := BH - FH$

$EF := \frac{AB \cdot FH}{BH}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.371306$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.40000$
$N_4 = 1.00000$
$R = 0.68750$

$\frac{(N_1+N_2)\cdot(N_3-N_4)+N_2\cdot N_3\cdot N_4}{N_2\cdot(N_3-N_4)-N_3\cdot N_4\cdot(N_1+N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 - N_3 - AC \cdot N_3 \cdot N_4}{AC \cdot N_4 - AC \cdot N_3 + N_3 \cdot N_4} = 0$$

$$R - \frac{(N_1 + N_2) \cdot (N_3 - N_4) + N_2 \cdot N_3 \cdot N_4}{N_2 \cdot (N_3 - N_4) - N_3 \cdot N_4 \cdot (N_1 + N_2)} = 0$$

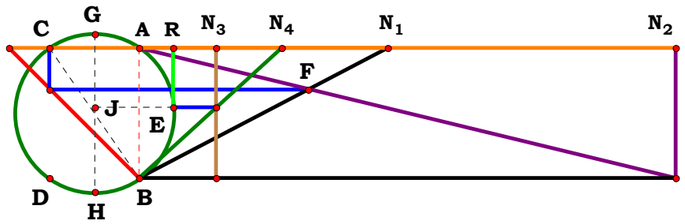
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(C - D) \cdot (A + B) - A \cdot N_u}{A \cdot (C - D) + N_u \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot n \cdot (Z \cdot o - Y \cdot p) - X \cdot m \cdot (Y \cdot Z + Y \cdot p - Z \cdot o)}{X \cdot m \cdot (Y \cdot Z - Y \cdot p + Z \cdot o) + W \cdot Y \cdot Z \cdot n} = 0$$

4RST2AB4R2



$N_1 = 1.90551$
$N_2 = 4.11387$
$N_3 = 0.59297$
$N_4 = 1.09426$
$R = 0.26245$

Unit. $AB := 1$ **Given.** $N_1 := 1.90551$ $N_2 := 4.11387$ $N_3 := .59297$ $N_4 := 1.09426$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $GH := \sqrt{AB^2 + AC^2}$ $GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2}$

$EJ := \sqrt{GJ \cdot (GH - GJ)}$ $R := EJ - \frac{AC}{2}$ $R = 0.262447$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot {N_4}^2 - 4 \cdot {N_3}^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{{N_4}^2}}{2 \cdot \sqrt{{N_4}^2}} = 0$$

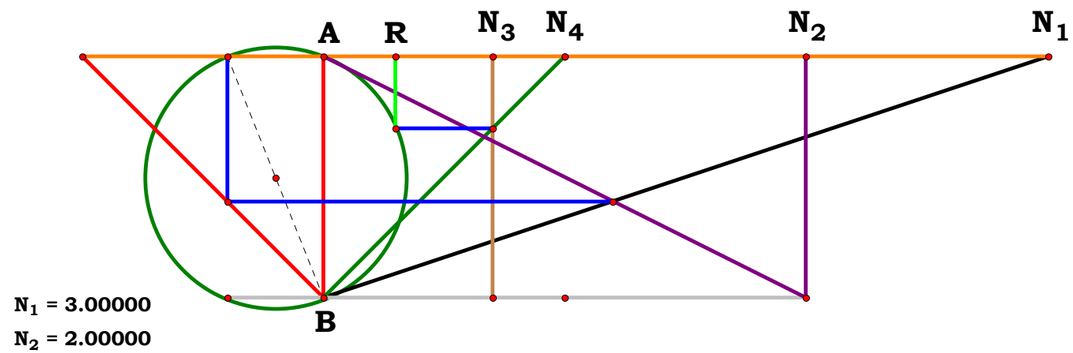
$$R - \frac{\sqrt{4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3) + (N_2 \cdot N_4)^2} - N_2 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - A \cdot C}{2 \cdot (A + B) \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

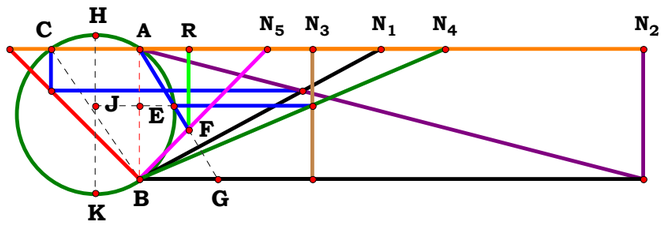
$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot o^2 \cdot Z^2 + 4 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)^2 \cdot (Z \cdot o - Y \cdot p)} - X \cdot Z \cdot m \cdot o}{2 \cdot Z \cdot o \cdot (W \cdot n + X \cdot m)} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 1.00000$
$R = 0.30000$

$$\frac{\sqrt{4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_4 - N_3) + (N_2 \cdot N_4)^2} - N_2 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_4} - R = 0.00000$$

4RST2AB4R3



$N_1 = 1.84739$
$N_2 = 3.86203$
$N_3 = 1.32909$
$N_4 = 2.34373$
$N_5 = 0.97826$
$R = 0.37362$

Unit. $AB := 1$ **Given.** $N_1 := 1.84739$ $N_2 := 3.86203$ $N_3 := 1.32909$

$N_4 := 2.34373$ $N_5 := .97826$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

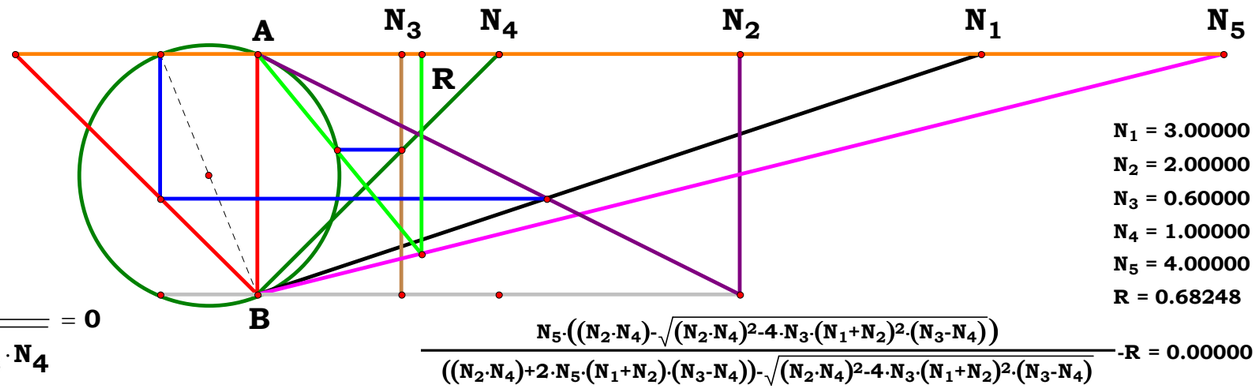
$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $HK := \sqrt{AB^2 + AC^2}$ $AL := \frac{N_4 - N_3}{N_4}$

$HJ := AL + \frac{HK - AB}{2}$ $EJ := \sqrt{HJ \cdot (HK - HJ)}$

$BG := \frac{\left(EJ - \frac{AC}{2}\right) \cdot AB}{AL}$ $R := \frac{N_5 \cdot BG}{N_5 + BG}$ $R = 0.37362$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$N_4 = 1.00000$
$N_5 = 4.00000$
$R = 0.68248$

$$\frac{N_5 \cdot \left((N_2 \cdot N_4) - \sqrt{(N_2 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}\right)}{\left((N_2 \cdot N_4) + 2 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3 - N_4)\right) - \sqrt{(N_2 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_3 \cdot \left(N_1 + N_2\right)^2 \cdot \left(N_3 - N_4\right)}\right]}{N_2 \cdot N_4 + 2 \cdot N_5 \cdot \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right) - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_3 \cdot \left(N_1 + N_2\right)^2 \cdot \left(N_3 - N_4\right)}} = 0$$

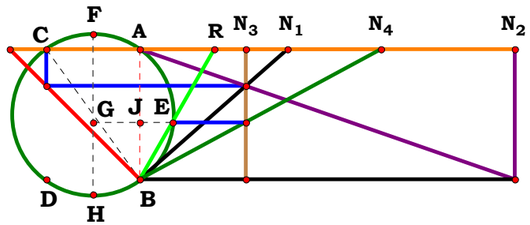
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)}\right]}{A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - 2 \cdot N_u \cdot (C - D) \cdot (A + B)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[W \cdot Y \cdot l \cdot n - \sqrt{W^2 \cdot l^2 \cdot n^2 \cdot Y^2 + 4 \cdot X \cdot o \cdot (V \cdot m + W \cdot l)^2 \cdot (Y \cdot n - X \cdot o)}\right]}{2 \cdot Z \cdot (X \cdot o - Y \cdot n) \cdot (V \cdot m + W \cdot l) + W \cdot Y \cdot l \cdot n \cdot p - p \cdot \sqrt{W^2 \cdot l^2 \cdot n^2 \cdot Y^2 + 4 \cdot X \cdot o \cdot (V \cdot m + W \cdot l)^2 \cdot (Y \cdot n - X \cdot o)}} = 0$$

4RST2AB4R4



$N_1 = 1.13064$
$N_2 = 2.87408$
$N_3 = 0.81574$
$N_4 = 1.84976$
$R = 0.57544$

Unit. $AB := 1$ Given. $N_1 := 1.13064$ $N_2 := 2.87408$ $N_3 := .81574$ $N_4 := 1.84976$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

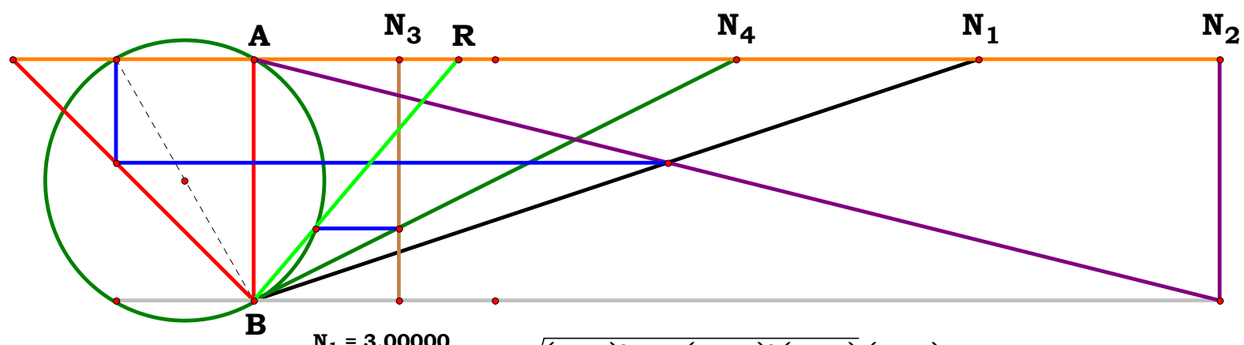
$AC := \frac{N_2}{N_1 + N_2}$ $AE := \frac{N_4 - N_3}{N_4}$

$BE := AB - AE$ $FH := \sqrt{AB^2 + AC^2}$

$FG := AE + \frac{FH - AB}{2}$ $EG := \sqrt{FG \cdot (FH - FG)}$

$EJ := EG - \frac{AC}{2}$ $R := \frac{EJ \cdot AB}{BE}$

$R = 0.575437$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.60000$
$N_4 = 2.00000$
$R = 0.84772$

$\frac{\sqrt{(N_2 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)} - (N_2 \cdot N_4)}{2 \cdot N_3 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)} - N_2 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_3} = 0$$

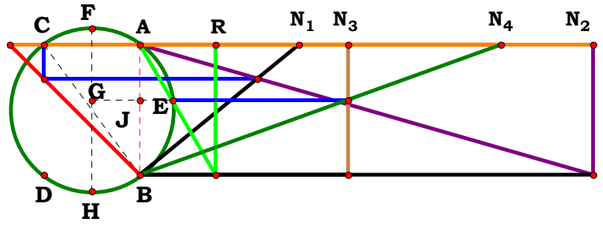
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - A \cdot C}{2 \cdot (A + B) \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)^2 \cdot (Z \cdot o - Y \cdot p) + X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot Z \cdot m \cdot o}{2 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)} = 0$$

4RST2AB4R5



$N_1 = 1.21782$
$N_2 = 3.47460$
$N_3 = 1.60029$
$N_4 = 2.76991$
$R = 0.58505$

Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := 3.47460$ $N_3 := 1.60029$ $N_4 := 2.76991$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AJ := \frac{N_4 - N_3}{N_4}$ $FH := \sqrt{AB^2 + AC^2}$

$FG := AJ + \frac{FH - AB}{2}$ $EG := \sqrt{FG \cdot (FH - FG)}$

$EJ := EG - \frac{AC}{2}$ $R := \frac{EJ \cdot AB}{AJ}$ $R = 0.585047$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

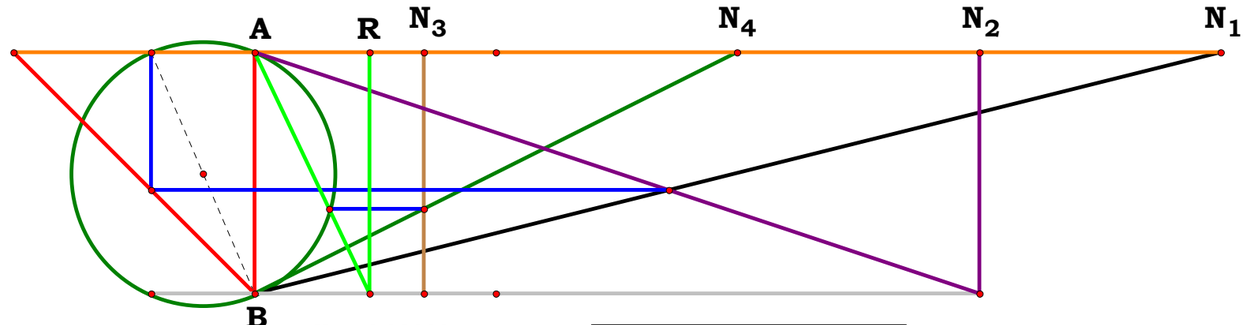
$$R - \frac{N_2 \cdot N_4 - \sqrt{N_2^2 \cdot N_4^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}}{2 \cdot (N_1 + N_2) \cdot (N_3 - N_4)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A + B)^2 \cdot (C - D)} - A \cdot C}{2 \cdot (A + B) \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

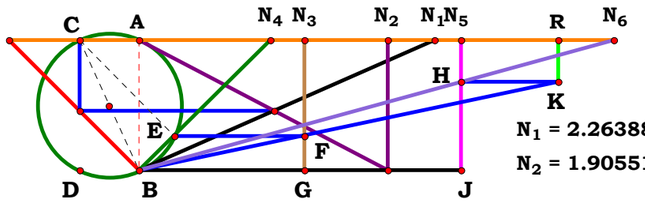
$$R - \frac{X \cdot Z \cdot m \cdot o - \sqrt{X^2 \cdot m^2 \cdot o^2 \cdot Z^2 + 4 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)^2 \cdot (Z \cdot o - Y \cdot p)}}{2 \cdot (W \cdot n + X \cdot m) \cdot (Y \cdot p - Z \cdot o)} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 0.70000$
$N_4 = 2.00000$
$R = 0.47478$

$$\frac{(N_2 \cdot N_4) - \sqrt{(N_2 \cdot N_4)^2 - 4 \cdot N_3 \cdot (N_1 + N_2)^2 \cdot (N_3 - N_4)}}{2 \cdot (N_1 + N_2) \cdot (N_3 - N_4)} - R = 0.00000$$

4RST2AB6R6



$N_3 = 1.27097$
$N_4 = 1.00709$
$N_5 = 2.46987$
$N_6 = 3.64185$
$R = 3.21676$

$N_1 = 2.26388$
$N_2 = 1.90551$

Unit. $AB := 1$ Given. $N_1 := 2.26388$ $N_2 := 1.90551$ $N_3 := 1.27097$

$N_4 := 1.00709$ $N_5 := 2.46987$ $N_6 := 3.64185$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

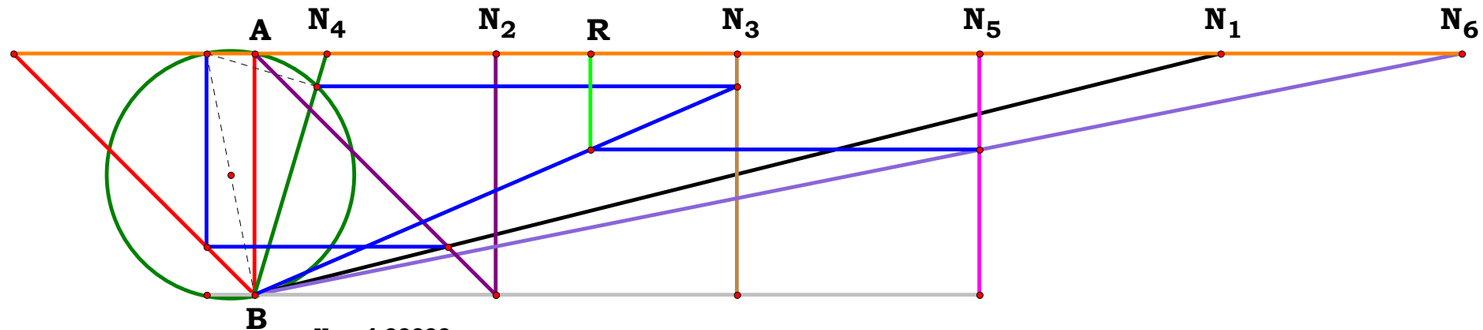
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $HN_5 := \frac{N_6 - N_5}{N_6}$ $HJ := AB - HN_5$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $CN_4 := N_4 + AC$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BE := BN_4 - EN_4$

$FG := \frac{AB \cdot BE}{BN_4}$ $R := \frac{N_3 \cdot HJ}{FG}$ $R = 3.216733$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 0.30000$
$N_5 = 3.00000$
$N_6 = 5.00000$
$R = 1.39149$

$\frac{N_3 \cdot N_5 \cdot (N_1+N_2) \cdot (N_4^2+1)}{N_6 \cdot ((N_1+N_2) - N_2 \cdot N_4)} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 - AC \cdot N_4 \cdot N_6} = 0$

$R - \frac{N_3 \cdot N_5 \cdot \left(N_1 + N_2\right) \cdot \left(N_4^2 + 1\right)}{N_6 \cdot \left(N_1 + N_2 - N_2 \cdot N_4\right)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

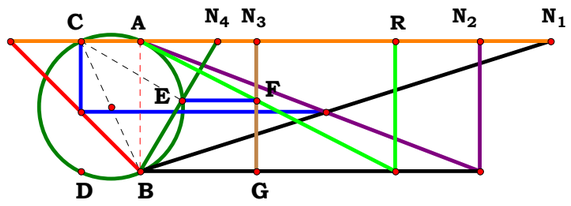
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$R - \frac{F \cdot N_u \cdot \left(D^2 + N_u^2\right) \cdot (A + B)}{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - A \cdot N_u\right]} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Y \cdot p \cdot (U \cdot l + V \cdot k) \cdot \left(N_4^2 + 1\right)}{Z \cdot m \cdot o \cdot \left(U \cdot l + V \cdot k - N_4 \cdot V \cdot k\right)} = 0$

4RST2AB4R7



$N_1 = 3.14529$
$N_2 = 2.60288$
$N_3 = 0.89323$
$N_4 = 0.59060$
$R = 1.95505$

Unit. $AB := 1$ Given. $N_1 := 3.14529$ $N_2 := 2.60288$ $N_3 := .89323$ $N_4 := .59060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$FN_3 := \frac{AB \cdot EN_4}{BN_4}$ $R := \frac{N_3 \cdot AB}{FN_3}$

$R = 1.955066$

Definitions.

$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot (AC + N_4)} = 0$

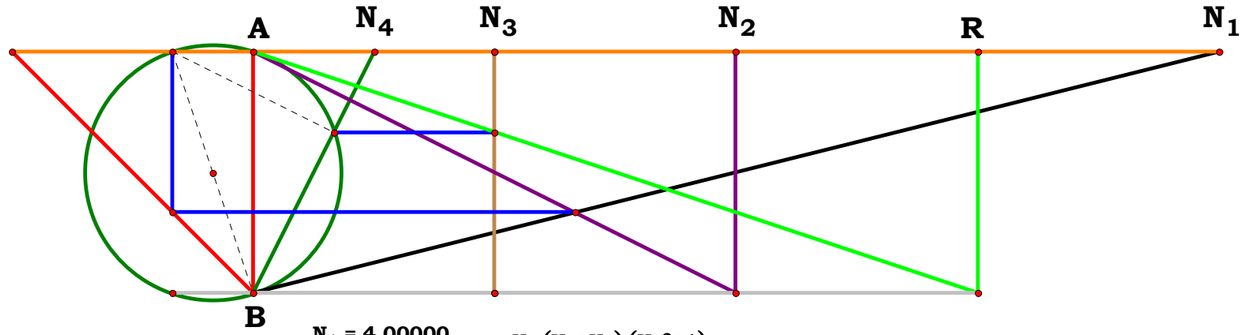
$R - \frac{N_3 \cdot (N_1 + N_2) \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(N_2 + N_1 \cdot N_4 + N_2 \cdot N_4\right)} = 0$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{\left(D^2 + N_u^2\right) \cdot (A + B)}{A \cdot C \cdot D + C \cdot N_u \cdot (A + B)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

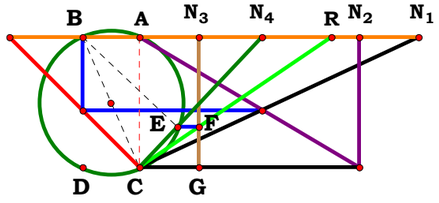
$R - \frac{Y \cdot (W \cdot n + X \cdot m) \cdot \left(Z^2 + p^2\right)}{Z \cdot o \cdot (W \cdot Z \cdot n + X \cdot Z \cdot m + X \cdot m \cdot p)} = 0$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.50000$
$R = 3.00000$

$\frac{N_3 \cdot (N_1 + N_2) \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(N_2 + N_1 \cdot N_4 + N_2 \cdot N_4\right)} - R = 0.00000$

4RST2AB4R8



$N_1 = 2.13797$
$N_2 = 1.68273$
$N_3 = 0.45737$
$N_4 = 0.93929$
$R = 1.46831$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 1.68273$ $N_3 := .45737$ $N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

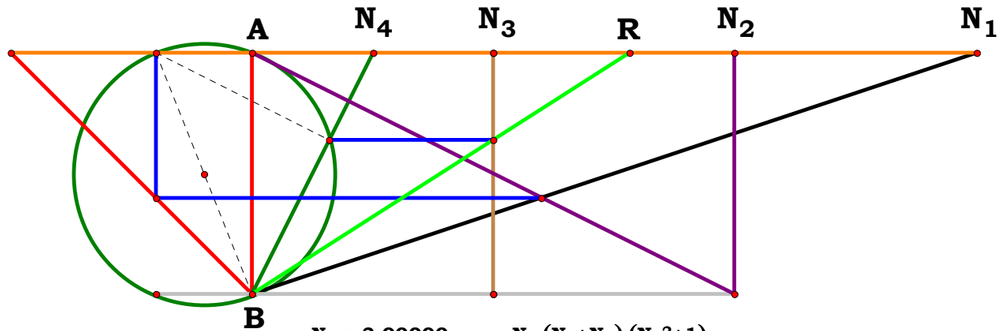
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $R := \frac{N_3 \cdot BN_4}{BE}$

$R = 1.468313$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.50000$
$R = 1.56250$

$\frac{N_3 \cdot (N_1+N_2) \cdot (N_4^2+1)}{(N_1+N_2) - N_2 \cdot N_4} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot (N_4^2 + 1)}{1 - AC \cdot N_4} = 0$

$R - \frac{N_3 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_1 + N_2 - N_2 \cdot N_4} = 0$

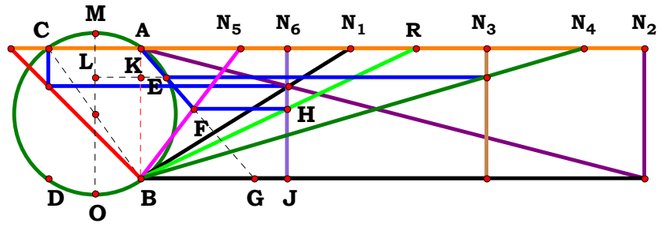
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{N_u \cdot (D^2 + N_u^2) \cdot (A + B)}{C \cdot D \cdot [D \cdot (A + B) - A \cdot N_u]} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot (W \cdot n + X \cdot m) \cdot (Z^2 + p^2)}{o \cdot p \cdot (W \cdot n \cdot p - X \cdot Z \cdot m + X \cdot m \cdot p)} = 0$

4RST2AB4R9



$N_1 = 1.60525$ $N_4 = 3.39948$
$N_2 = 3.86203$ $N_5 = 0.76518$
$N_3 = 2.65604$ $N_6 = 1.12355$
$R = 2.11046$

Unit. $AB := 1$ **Given.** $N_1 := 1.60525$ $N_2 := 3.86203$ $N_3 := 2.65604$

$N_4 := 3.39948$ $N_5 := .76518$ $N_6 := 1.12355$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

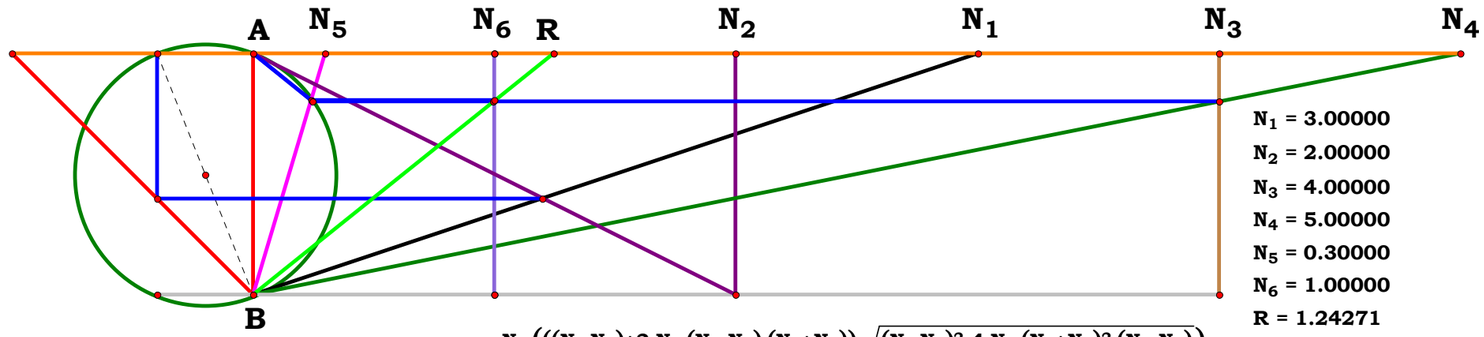
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AK := \frac{N_4 - N_3}{N_4}$ $MO := \sqrt{AB^2 + AC^2}$

$ML := AK + \frac{MO - AB}{2}$ $EL := \sqrt{ML \cdot (MO - ML)}$

$EK := EL - \frac{AC}{2}$ $BG := \frac{EK \cdot AB}{AK}$ $HJ := \frac{BG}{BG + N_5}$

$R := \frac{N_6}{HJ}$ $R = 2.110458$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 0.30000$
$N_6 = 1.00000$
$R = 1.24271$

$$\frac{N_6\cdot\left(\left(\left(N_2\cdot N_4\right)+2\cdot N_5\cdot\left(N_3-N_4\right)\cdot\left(N_1+N_2\right)\right)-\sqrt{\left(N_2\cdot N_4\right)^2-4\cdot N_3\cdot\left(N_1+N_2\right)^2\cdot\left(N_3-N_4\right)}\right)}{\left(N_2\cdot N_4\right)-\sqrt{\left(N_2\cdot N_4\right)^2-4\cdot N_3\cdot\left(N_1+N_2\right)^2\cdot\left(N_3-N_4\right)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_6\cdot\left[\sqrt{N_4^{\,2}}\cdot\left(AC\cdot N_4+2\cdot N_3\cdot N_5-2\cdot N_4\cdot N_5\right)-N_4\cdot\sqrt{AC^2\cdot N_4^{\,2}-4\cdot N_3^{\,2}+4\cdot N_3\cdot N_4}\right]}{N_4\cdot\left(AC\cdot\sqrt{N_4^{\,2}}-\sqrt{AC^2\cdot N_4^{\,2}-4\cdot N_3^{\,2}+4\cdot N_3\cdot N_4}\right)} = 0$$

$$R - \frac{N_6\cdot\left[N_2\cdot N_4-\sqrt{N_2^{\,2}\cdot N_4^{\,2}-4\cdot N_3\cdot\left(N_1+N_2\right)^2\cdot\left(N_3-N_4\right)}+2\cdot N_5\cdot\left(N_3-N_4\right)\cdot\left(N_1+N_2\right)\right]}{N_2\cdot N_4-\sqrt{N_2^{\,2}\cdot N_4^{\,2}-4\cdot N_3\cdot\left(N_1+N_2\right)^2\cdot\left(N_3-N_4\right)}} = 0$$

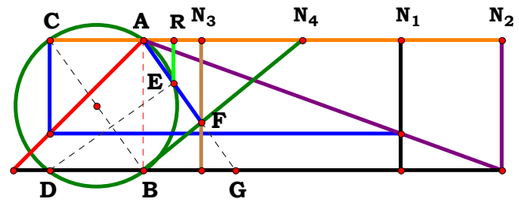
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u\cdot\left[A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)\right]}{E\cdot F\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z\cdot\left[2\cdot Y\cdot(W\cdot n-X\cdot m)\cdot(U\cdot l+V\cdot k)+V\cdot X\cdot k\cdot m\cdot o-o\cdot\sqrt{V^2\cdot X^2\cdot k^2\cdot m^2-4\cdot W\cdot n\cdot(U\cdot l+V\cdot k)^2\cdot(W\cdot n-X\cdot m)}\right]}{o\cdot p\cdot\left[V\cdot X\cdot k\cdot m-\sqrt{V^2\cdot X^2\cdot k^2\cdot m^2-4\cdot W\cdot n\cdot(U\cdot l+V\cdot k)^2\cdot(W\cdot n-X\cdot m)}\right]} = 0$$

4RST2AB5R0



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.44768$
$N_4 = 1.22018$
$R = 0.23205$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .44768$ $N_4 := 1.22018$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

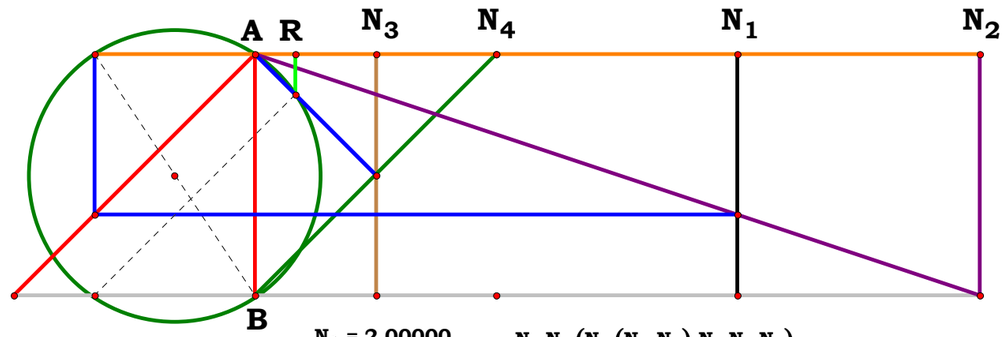
$AC := \frac{N_1}{N_2}$ $FN_3 := \frac{N_4 - N_3}{N_4}$

$AF := \sqrt{N_3^2 + FN_3^2}$ $AG := \frac{AF \cdot AB}{FN_3}$

$BG := \frac{N_3 \cdot AB}{FN_3}$ $DG := BG + AC$

$EG := \frac{N_3 \cdot DG}{AF}$ $AE := AG - EG$

$R := \frac{N_3 \cdot AE}{AF}$ $R = 0.232053$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 1.00000$
$R = 0.16667$

$\frac{N_3 \cdot N_4 \cdot (N_2 \cdot (N_4 - N_3) - N_1 \cdot N_3 \cdot N_4)}{N_2 \cdot (N_3 \cdot N_4 \cdot (N_3 \cdot N_4 - 2) + N_3^2 + N_4^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_4 - N_3 - AC \cdot N_3 \cdot N_4)}{N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot [N_2 \cdot (N_4 - N_3) - N_1 \cdot N_3 \cdot N_4]}{N_2 \cdot [N_3 \cdot N_4 \cdot (N_3 \cdot N_4 - 2) + N_3^2 + N_4^2]} = 0$$

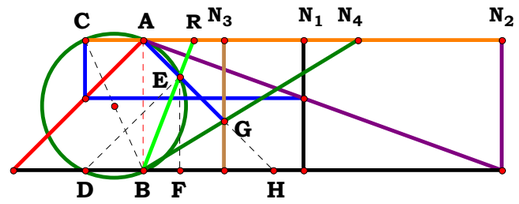
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [A \cdot (C - D) - B \cdot N_u]}{A \cdot [(C - D)^2 + N_u^2]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (X \cdot Z \cdot m \cdot o - X \cdot Y \cdot m \cdot p - W \cdot Y \cdot Z \cdot n)}{X \cdot m \cdot (Y^2 \cdot Z^2 + Y^2 \cdot p^2 - 2 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2)} = 0$$

4RST2AB5R1



$N_1 = 1.22750$
$N_2 = 2.74817$
$N_3 = 0.62203$
$N_4 = 1.64635$
$R = 0.38264$

Unit. $AB := 1$ Given. $N_1 := 1.22750$ $N_2 := 2.74817$ $N_3 := .62203$ $N_4 := 1.64635$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

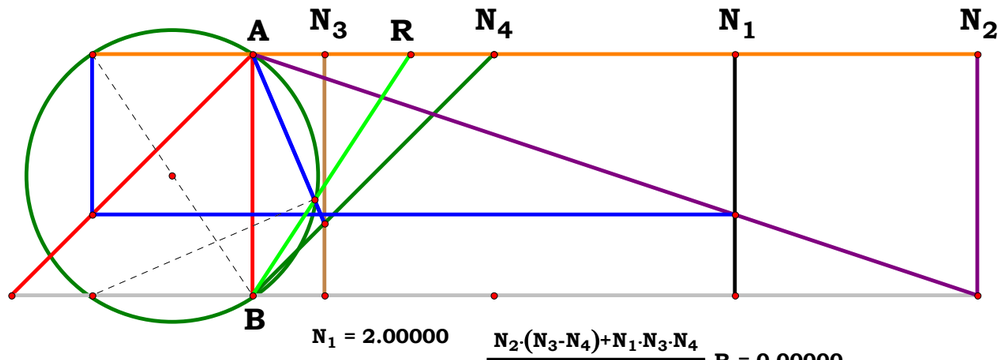
$AC := \frac{N_1}{N_2}$ $GN_3 := \frac{N_4 - N_3}{N_4}$ $AG := \sqrt{N_3^2 + GN_3^2}$

$BH := \frac{N_3 \cdot AB}{GN_3}$ $DH := BH + AC$ $EH := \frac{N_3 \cdot DH}{AG}$

$FH := \frac{N_3 \cdot EH}{AG}$ $BF := BH - FH$

$EF := \frac{AB \cdot FH}{BH}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.382629$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.30000$
$N_4 = 1.00000$
$R = 0.65217$

$\frac{N_2 \cdot (N_3 - N_4) + N_1 \cdot N_3 \cdot N_4}{N_1 \cdot (N_3 - N_4) - N_2 \cdot N_3 \cdot N_4} - R = 0.00000$

Definitions.

$R - \frac{N_4 - N_3 - AC \cdot N_3 \cdot N_4}{AC \cdot N_4 - AC \cdot N_3 + N_3 \cdot N_4} = 0$

$R - \frac{N_2 \cdot (N_3 - N_4) + N_1 \cdot N_3 \cdot N_4}{N_1 \cdot (N_3 - N_4) - N_2 \cdot N_3 \cdot N_4} = 0$

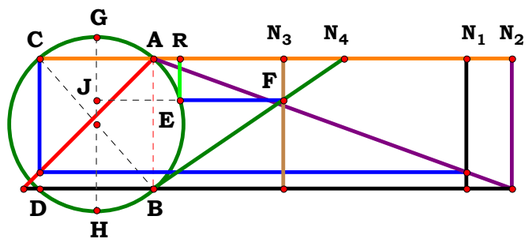
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{A \cdot (C - D) - B \cdot N_u}{B \cdot (C - D) + A \cdot N_u} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Y \cdot Z \cdot n + X \cdot Y \cdot m \cdot p - X \cdot Z \cdot m \cdot o}{W \cdot Y \cdot n \cdot p - X \cdot Y \cdot Z \cdot m - W \cdot Z \cdot n \cdot o} = 0$

4RST2AB5R2



$N_1 = 2.39948$
$N_2 = 2.74817$
$N_3 = 0.99977$
$N_4 = 1.46232$
$R = 0.20128$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 2.74817$ $N_3 := .99977$ $N_4 := 1.46232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $GH := \sqrt{AB^2 + AC^2}$

$GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2}$ $EJ := \sqrt{GJ \cdot (GH - GJ)}$

$R := EJ - \frac{AC}{2}$ $R = 0.201283$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_4{}^2 - 4 \cdot N_3{}^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{N_4{}^2}}{2 \cdot \sqrt{N_4{}^2}} = 0$$

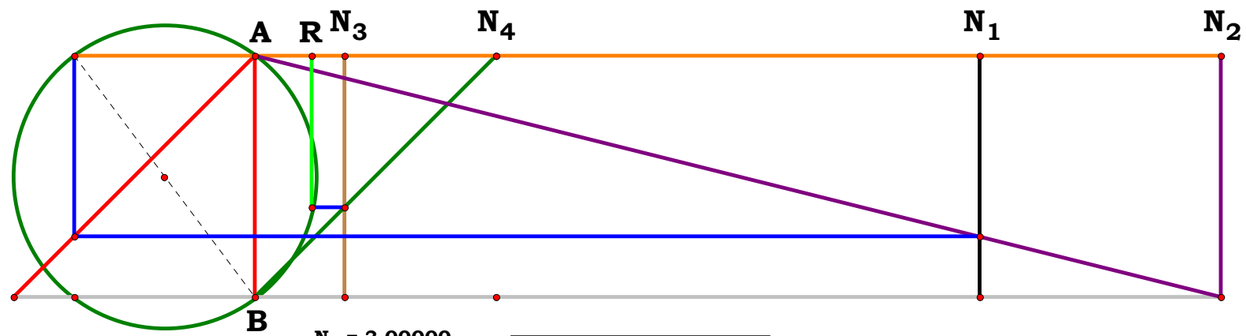
$$R - \frac{\sqrt{N_1{}^2 \cdot N_4{}^2 - 4 \cdot N_2{}^2 \cdot N_3 \cdot (N_3 - N_4)} - N_1 \cdot N_4}{2 \cdot N_2 \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

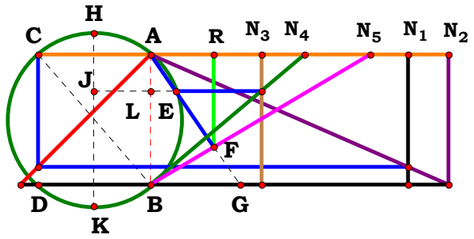
$$R - \frac{\sqrt{W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y \cdot m^2 \cdot p \cdot (Y \cdot p - Z \cdot o)} - W \cdot Z \cdot n \cdot o}{2 \cdot X \cdot Z \cdot m \cdot o} = 0$$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.37128$
$N_4 = 1.00000$
$R = 0.23660$

$$\frac{\sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2{}^2 \cdot N_3 \cdot (N_3 - N_4)} - (N_1 \cdot N_4)}{2 \cdot N_2 \cdot N_4} - R = 0.00000$$

4RST2AB5R3



$N_1 = 1.97331$
$N_2 = 2.28325$
$N_3 = 0.85448$
$N_4 = 1.18144$
$N_5 = 1.68533$
$R = 0.48761$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.28325$ $N_3 := .85448$ $N_4 := 1.18144$ $N_5 := 1.68533$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5}$$

$$V := 17 \quad W := 20 \quad X := 19 \quad Y := 18 \quad Z := 17$$

$$l := \frac{V}{N_1} \quad m := \frac{W}{N_2} \quad n := \frac{X}{N_3} \quad o := \frac{Y}{N_4} \quad p := \frac{Z}{N_5}$$

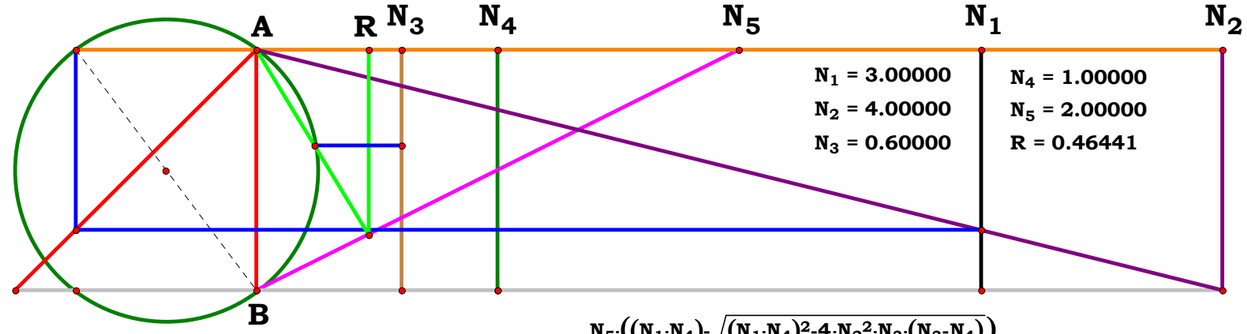
Descriptions.

$$AC := \frac{N_1}{N_2} \qquad HK := \sqrt{AB^2 + AC^2}$$

$$AL := \frac{N_4 - N_3}{N_4} \qquad HJ := AL + \frac{HK - AB}{2}$$

$$EJ := \sqrt{HJ \cdot (HK - HJ)} \qquad BG := -\frac{AB \cdot (AC - 2 \cdot EJ)}{2 \cdot AL}$$

$$R := \frac{N_5 \cdot BG}{N_5 + BG} \qquad R = 0.487604$$



$$\frac{N_5 \cdot \left((N_1 \cdot N_4) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}\right)}{\left((N_1 \cdot N_4) + 2 \cdot N_2 \cdot N_5 \cdot (N_3 - N_4)\right) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}\right]}{N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_5 \cdot (N_3 - N_4) - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}} = 0$$

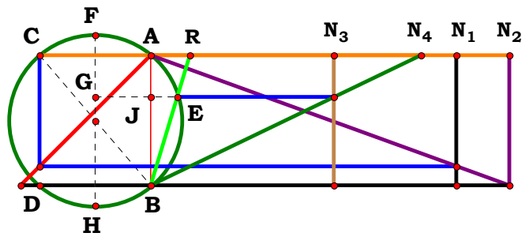
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} + 2 \cdot N_u \cdot A \cdot (C - D) - B \cdot C \cdot E} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left[V \cdot Y \cdot m \cdot n - \sqrt{V^2 \cdot Y^2 \cdot m^2 \cdot n^2 - 4 \cdot W^2 \cdot X \cdot l^2 \cdot o \cdot (X \cdot o - Y \cdot n)}\right]}{2 \cdot W \cdot Z \cdot l \cdot (X \cdot o - Y \cdot n) + V \cdot Y \cdot m \cdot n \cdot p - p \cdot \sqrt{V^2 \cdot Y^2 \cdot m^2 \cdot n^2 - 4 \cdot W^2 \cdot X \cdot l^2 \cdot o \cdot (X \cdot o - Y \cdot n)}} = 0$$

4RST2AB5R4



$N_1 = 2.34137$
$N_2 = 2.74817$
$N_3 = 1.40657$
$N_4 = 2.07253$
$R = 0.30369$

Unit. $AB := 1$ Given. $N_1 := 2.34137$ $N_2 := 2.74817$ $N_3 := 1.40657$ $N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

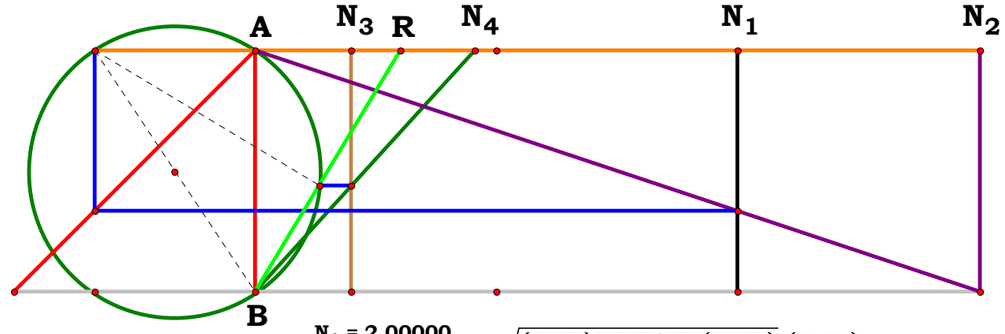
Descriptions.

$AC := \frac{N_1}{N_2}$ $AE := \frac{N_4 - N_3}{N_4}$ $BE := AB - AE$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AE + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{BE}$ $R = 0.303689$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.40000$
$N_4 = 0.91111$
$R = 0.60245$

$\frac{\sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} - (N_1 \cdot N_4)}{2 \cdot N_2 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{\sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} - N_1 \cdot N_4}{2 \cdot N_2 \cdot N_3} = 0$$

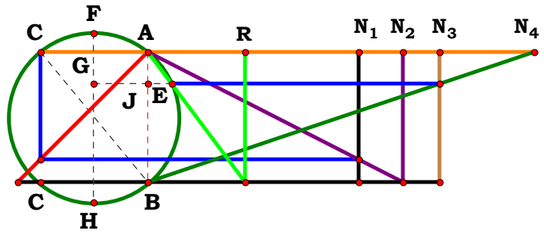
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y \cdot m^2 \cdot p \cdot (Y \cdot p - Z \cdot o)} - W \cdot Z \cdot n \cdot o}{2 \cdot X \cdot Y \cdot m \cdot p} = 0$$

4RST2AB5R5



$N_1 = 1.61493$
$N_2 = 1.95394$
$N_3 = 2.23955$
$N_4 = 2.96362$
$R = 0.74864$

Unit. $AB := 1$ Given. $N_1 := 1.61493$ $N_2 := 1.95394$ $N_3 := 2.23955$ $N_4 := 2.96362$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

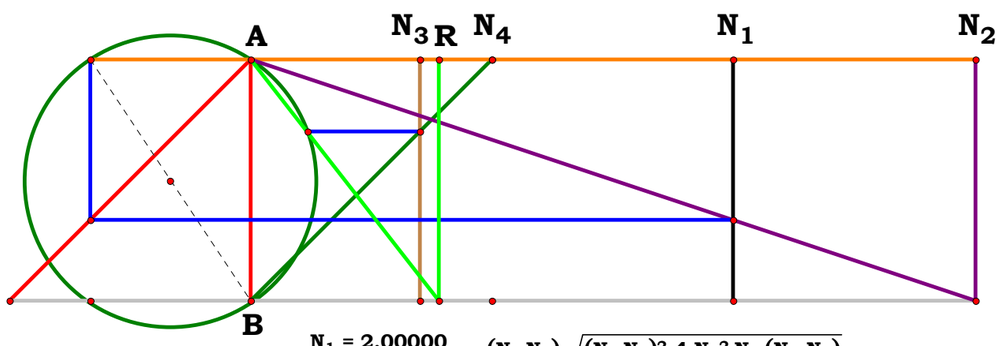
Descriptions.

$AC := \frac{N_1}{N_2}$ $AJ := \frac{N_4 - N_3}{N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AJ + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{AJ}$ $R = 0.748639$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.70000$
$N_4 = 1.00000$
$R = 0.77778$

$\frac{(N_1 \cdot N_4) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_2 \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}}{2 \cdot N_2 \cdot (N_3 - N_4)} = 0$$

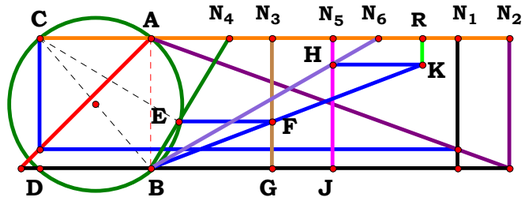
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot o - \sqrt{W^2 \cdot Z^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y \cdot m^2 \cdot p \cdot (Y \cdot p - Z \cdot o)}}{2 \cdot X \cdot m \cdot (Y \cdot p - Z \cdot o)} = 0$$

4RST2AB5R6



$N_1 = 2.35105$ $N_5 = 1.39475$
$N_2 = 2.74817$ $N_6 = 1.74344$
$N_3 = 0.93197$ $R = 2.08498$
$N_4 = 0.60029$

Unit. $AB := 1$ **Given.** $N_1 := 2.35105$ $N_2 := 2.74817$ $N_3 := .93197$

$N_4 := .60029$ $N_5 := 1.39475$ $N_6 := 1.74344$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $HN_5 := \frac{N_6 - N_5}{N_6}$ $HJ := AB - HN_5$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $CN_4 := N_4 + AC$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BE := BN_4 - EN_4$

$FG := \frac{AB \cdot BE}{BN_4}$ $R := \frac{N_3 \cdot HJ}{FG}$ $R = 2.084969$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 - AC \cdot N_4 \cdot N_6} = 0$$

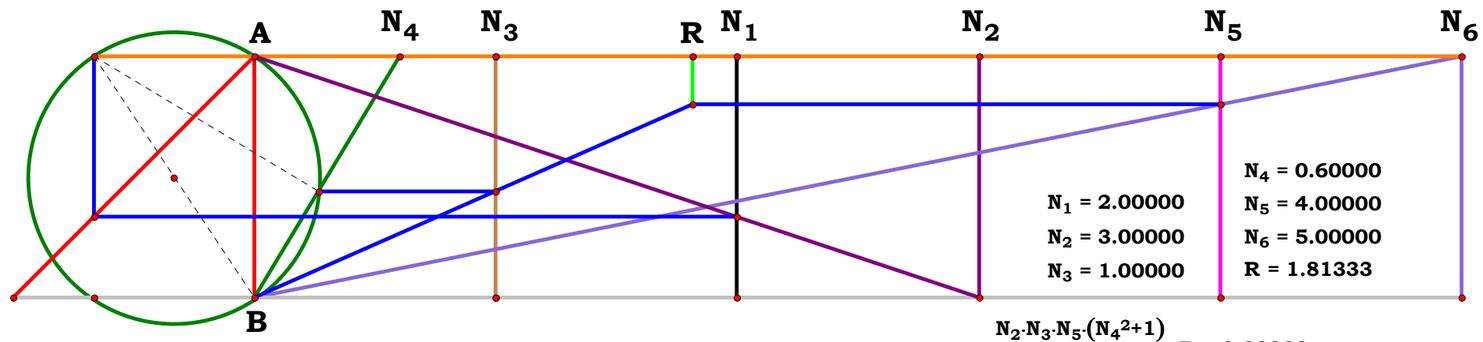
$$R - \frac{N_2 \cdot N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 \cdot \left(N_2 - N_1 \cdot N_4\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u^2\right)}{\left[C \cdot D \cdot E \cdot \left(A \cdot D - B \cdot N_u\right)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

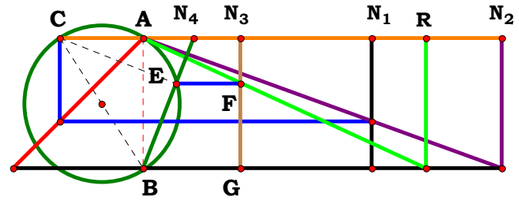
$$R - \frac{V \cdot W \cdot Y \cdot k \cdot p \cdot \left(X^2 + n^2\right)}{Z \cdot m \cdot n \cdot o \cdot (V \cdot k \cdot n - U \cdot X \cdot l)} = 0$$



$N_1 = 2.00000$ $N_4 = 0.60000$
$N_2 = 3.00000$ $N_5 = 4.00000$
$N_3 = 1.00000$ $N_6 = 5.00000$
$R = 1.81333$

$\frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2+1)}{N_6 \cdot (N_2 - N_1 \cdot N_4)} - R = 0.00000$

4RST2AB5R7



$N_1 = 1.75053$
$N_2 = 2.74817$
$N_3 = 0.74794$
$N_4 = 0.38720$
$R = 2.16881$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 2.74817$ $N_3 := .74794$ $N_4 := .38720$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

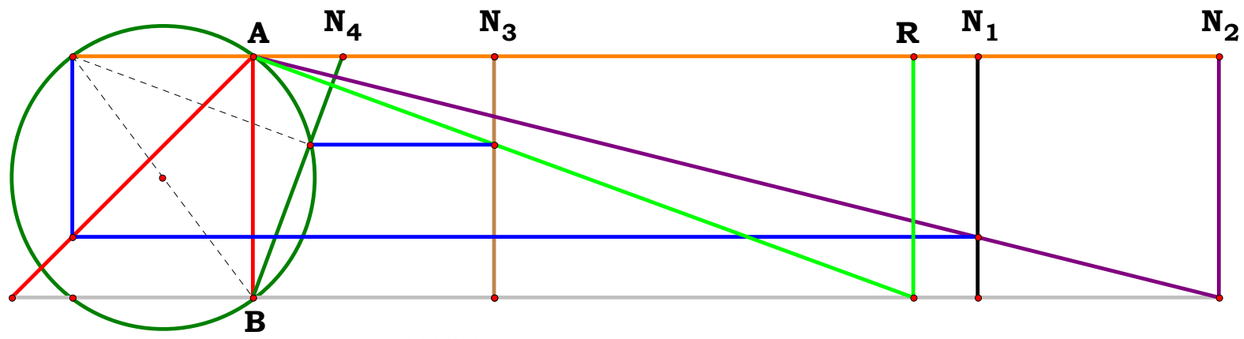
Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$FN_3 := \frac{AB \cdot EN_4}{BN_4}$ $R := \frac{N_3 \cdot AB}{FN_3}$

$R = 2.168823$



Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot (AC + N_4)} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot \left(N_1 + N_2 \cdot N_4\right)} = 0$$

$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 1.00000$
$N_4 = 0.37128$
$R = 2.73321$

$\frac{N_2 \cdot N_3 \cdot (N_4^2+1)}{N_4 \cdot (N_1+N_2 \cdot N_4)} - R = 0.00000$

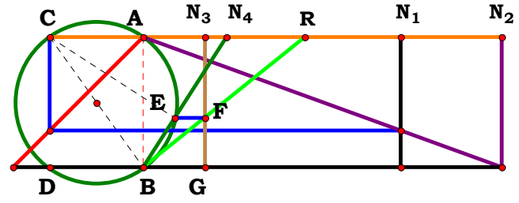
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot \left(D^2 + N_u^2\right)}{C \cdot \left(B \cdot D + A \cdot N_u\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot m \cdot \left(Z^2 + p^2\right)}{X \cdot m \cdot o \cdot Z^2 + W \cdot n \cdot o \cdot p \cdot Z} = 0$$

4RST2AB5R8



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.47674$
$N_4 = 0.63903$
$R = 1.24074$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .47674$ $N_4 := .63903$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

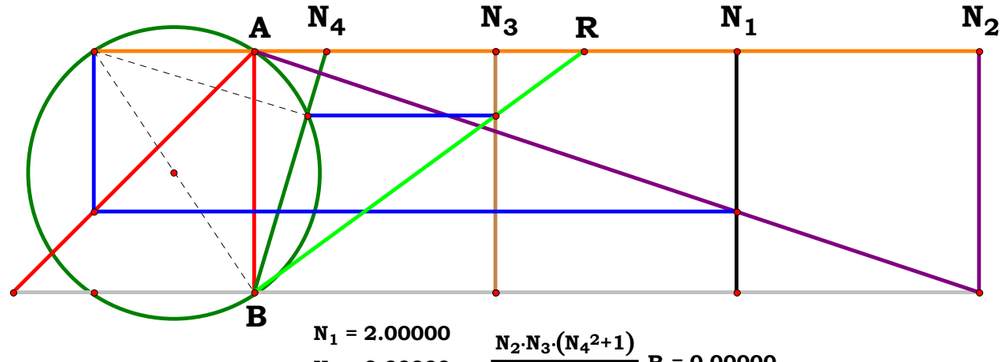
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BE := BN_4 - EN_4$

$R := \frac{N_3 \cdot BN_4}{BE}$ $R = 1.240736$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.30000$
$R = 1.36250$

$\frac{N_2 \cdot N_3 \cdot (N_4^2+1)}{N_2 - N_1 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{1 - AC \cdot N_4} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_4^2 + 1\right)}{N_2 - N_1 \cdot N_4} = 0$$

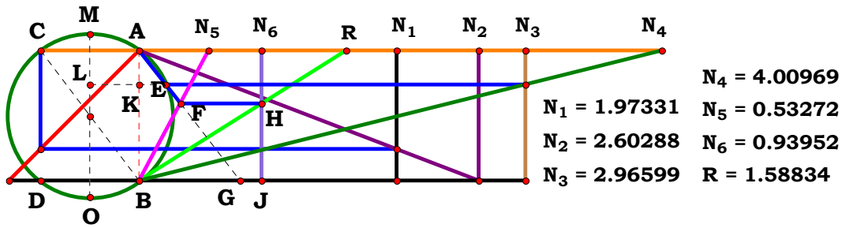
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{A \cdot N_u \cdot \left(D^2 + N_u^2\right)}{C \cdot D \cdot \left(A \cdot D - B \cdot N_u\right)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{X \cdot Y \cdot m \cdot \left(Z^2 + p^2\right)}{X \cdot m \cdot o \cdot p^2 - W \cdot Z \cdot n \cdot o \cdot p} = 0$$

4RST2AB5R9



$N_4 = 4.00969$ $N_5 = 0.53272$ $N_6 = 0.93952$
$N_1 = 1.97331$ $N_2 = 2.60288$ $N_3 = 2.96599$ $R = 1.58834$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.60288$ $N_3 := 2.96599$ $N_4 := 4.00969$ $N_5 := .53272$ $N_6 := .93952$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

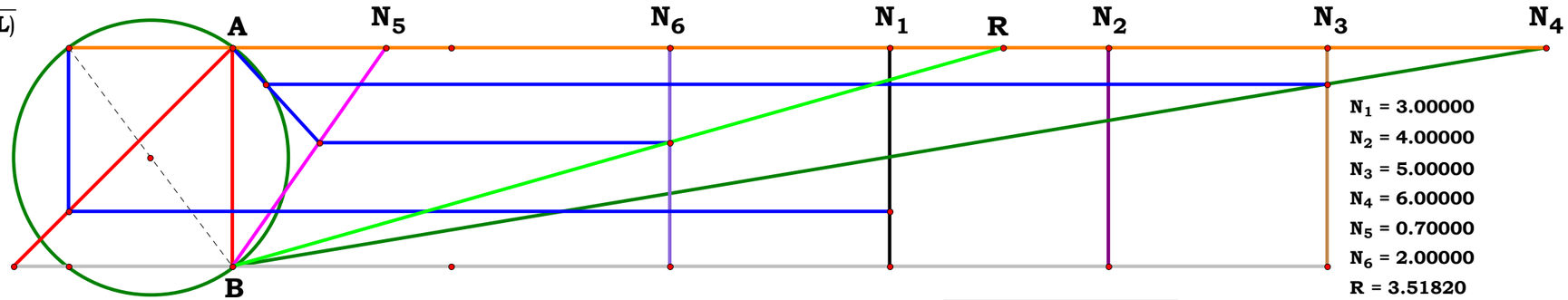
$AC := \frac{N_1}{N_2}$ $AK := \frac{N_4 - N_3}{N_4}$ $MO := \sqrt{AB^2 + AC^2}$

$ML := AK + \frac{MO - AB}{2}$ $EL := \sqrt{ML \cdot (MO - ML)}$

$EK := EL - \frac{AC}{2}$ $BG := \frac{EK \cdot AB}{AK}$

$HJ := \frac{BG}{BG + N_5}$ $R := \frac{N_6}{HJ}$

$R = 1.588344$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 5.00000$
$N_4 = 6.00000$
$N_5 = 0.70000$
$N_6 = 2.00000$
$R = 3.51820$

$\frac{N_6 \cdot (((N_1 \cdot N_4) + 2 \cdot N_2 \cdot N_5 \cdot (N_3 - N_4)) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)})}{(N_1 \cdot N_4) - \sqrt{(N_1 \cdot N_4)^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)}} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right]}{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)} = 0$$

$$R - \frac{N_6 \cdot \left[N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_5 \cdot \left(N_3 - N_4\right) - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot \left(N_3 - N_4\right)}\right]}{N_1 \cdot N_4 - \sqrt{N_1^2 \cdot N_4^2 - 4 \cdot N_2^2 \cdot N_3 \cdot \left(N_3 - N_4\right)}} = 0$$

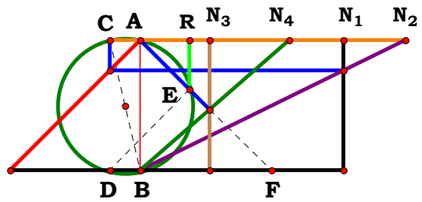
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} + 2 \cdot N_u \cdot A \cdot (C - D) - B \cdot C \cdot E\right]}{E \cdot F \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[2 \cdot V \cdot Y \cdot k \cdot (W \cdot n - X \cdot m) + U \cdot X \cdot l \cdot m \cdot o - o \cdot \sqrt{U^2 \cdot X^2 \cdot l^2 \cdot m^2 - 4 \cdot V^2 \cdot W \cdot k^2 \cdot n \cdot (W \cdot n - X \cdot m)}\right]}{o \cdot p \cdot \left[U \cdot X \cdot l \cdot m - \sqrt{U^2 \cdot X^2 \cdot l^2 \cdot m^2 - 4 \cdot V^2 \cdot W \cdot k^2 \cdot n \cdot (W \cdot n - X \cdot m)}\right]} = 0$$

4RST2AB6R0



$N_1 = 1.55682$
$N_2 = 2.03142$
$N_3 = 0.53485$
$N_4 = 1.14269$
$R = 0.38254$

Unit. $AB := 1$ Given. $N_1 := 1.55682$ $N_2 := 2.03142$ $N_3 := .53485$ $N_4 := 1.14269$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

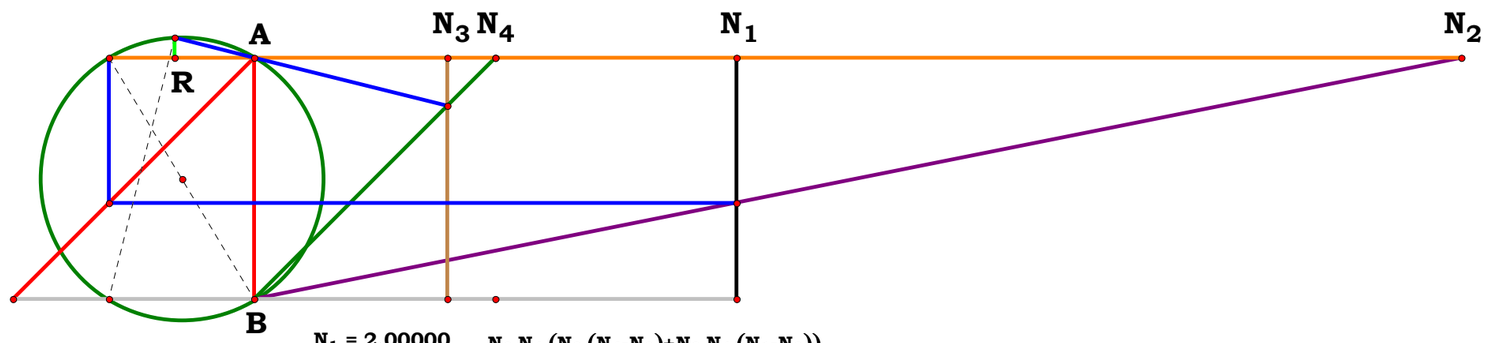
$AC := \frac{N_2 - N_1}{N_2}$ $FN_3 := \frac{N_4 - N_3}{N_4}$

$AF := \sqrt{N_3^2 + FN_3^2}$ $AG := \frac{AF \cdot AB}{FN_3}$

$BG := \frac{N_3 \cdot AB}{FN_3}$ $DG := BG + AC$

$EG := \frac{N_3 \cdot DG}{AF}$ $AE := AG - EG$

$R := \frac{N_3 \cdot AE}{AF}$ $R = 0.38254$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 0.80000$
$N_4 = 1.00000$
$R = -0.32941$

$\frac{N_3 \cdot N_4 \cdot (N_2 \cdot (N_4 - N_3) + N_3 \cdot N_4 \cdot (N_1 - N_2))}{N_2 \cdot (N_3 \cdot N_4 \cdot (N_3 \cdot N_4 - 2) + N_3^2 + N_4^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_4 - N_3 - AC \cdot N_3 \cdot N_4)}{N_3^2 \cdot N_4^2 + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot [N_2 \cdot (N_4 - N_3) + N_3 \cdot N_4 \cdot (N_1 - N_2)]}{N_2 \cdot [N_3 \cdot N_4 \cdot (N_3 \cdot N_4 - 2) + N_3^2 + N_4^2]} = 0$$

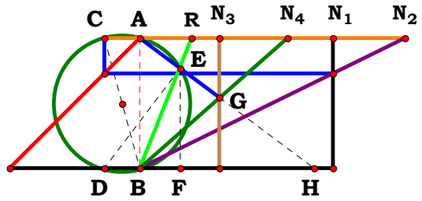
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u \cdot [A \cdot (C - D) - N_u \cdot (A - B)]}{A \cdot [(C - D)^2 + N_u^2]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (W \cdot Y \cdot Z \cdot n - X \cdot Y \cdot Z \cdot m - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)}{X \cdot m \cdot (Y^2 \cdot Z^2 + Y^2 \cdot p^2 - 2 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2)} = 0$$

4RST2AB6R1



$N_1 = 1.47933$
$N_2 = 2.03142$
$N_3 = 0.61234$
$N_4 = 1.13301$
$R = 0.39760$

Unit. $AB := 1$ Given. $N_1 := 1.47933$ $N_2 := 2.03142$ $N_3 := .61234$ $N_4 := 1.13301$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $GN_3 := \frac{N_4 - N_3}{N_4}$

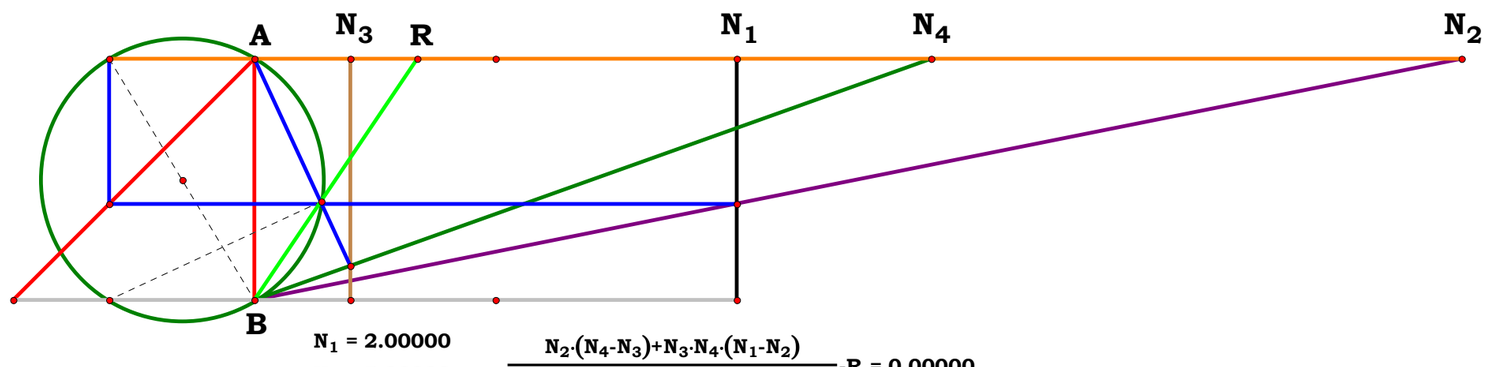
$AG := \sqrt{N_3^2 + GN_3^2}$ $BH := \frac{N_3 \cdot AB}{GN_3}$

$DH := BH + AC$ $EH := \frac{N_3 \cdot DH}{AG}$

$FH := \frac{N_3 \cdot EH}{AG}$ $BF := BH - FH$

$EF := \frac{AB \cdot FH}{BH}$ $R := \frac{BF \cdot AB}{EF}$

$R = 0.397604$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 0.40000$
$N_4 = 2.80398$
$R = 0.67513$

$$\frac{N_2 \cdot (N_4 - N_3) + N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_3 + N_4 \cdot (N_2 - N_1) + N_2 \cdot N_3 \cdot (N_4 - 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 - N_3 - AC \cdot N_3 \cdot N_4}{AC \cdot N_4 - AC \cdot N_3 + N_3 \cdot N_4} = 0$$

$$R - \frac{N_2 \cdot (N_4 - N_3) + N_3 \cdot N_4 \cdot (N_1 - N_2)}{N_1 \cdot N_3 + N_4 \cdot (N_2 - N_1) + N_2 \cdot N_3 \cdot (N_4 - 1)} = 0$$

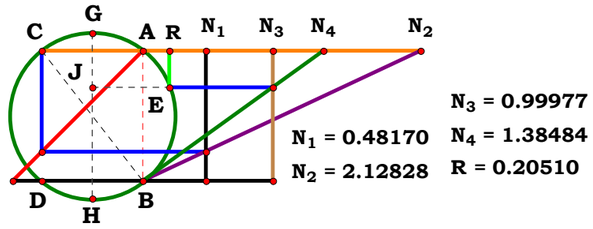
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot (C - D) - N_u \cdot (A - B)}{(C - D) \cdot (A - B) + A \cdot N_u} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (W \cdot n - X \cdot m) - X \cdot m \cdot (Y \cdot p - Z \cdot o)}{X \cdot m \cdot (Y \cdot Z - Y \cdot p + Z \cdot o) + W \cdot n \cdot (Y \cdot p - Z \cdot o)} = 0$$

4RST2AB6R2



Unit. $AB := 1$ Given. $N_1 := .48170$ $N_2 := 2.12828$ $N_3 := .99977$ $N_4 := 1.38484$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

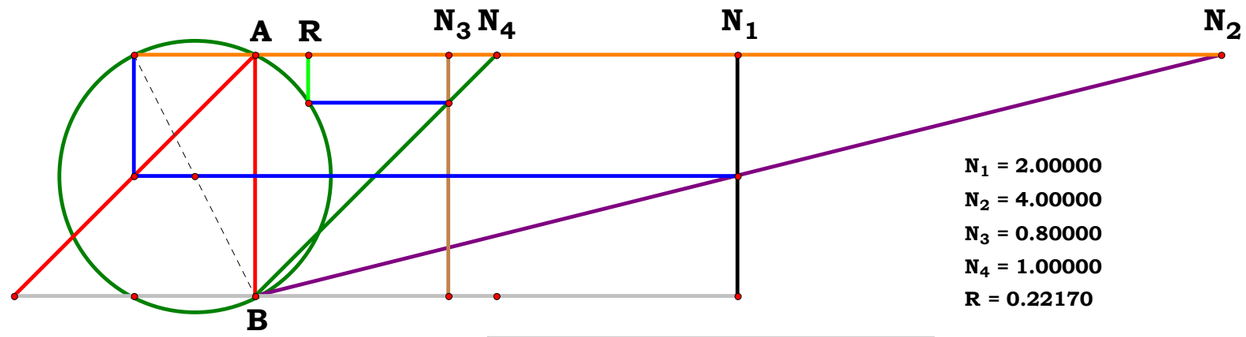
$$AC := \frac{N_2 - N_1}{N_2} \qquad GH := \sqrt{AB^2 + AC^2}$$

$$GJ := \frac{N_4 - N_3}{N_4} + \frac{GH - AB}{2} \qquad EJ := \sqrt{GJ \cdot (GH - GJ)}$$

$$R := EJ - \frac{AC}{2} \qquad R = 0.205098$$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_4^{\,2} - 4 \cdot N_3^{\,2} + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{N_4^{\,2}}}{2 \cdot \sqrt{N_4^{\,2}}} = 0$$



$$R - \frac{\sqrt{N_2^{\,2} \cdot N_4^{\,2} + N_1 \cdot N_4^{\,2} \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^{\,2} \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_4} = 0$$

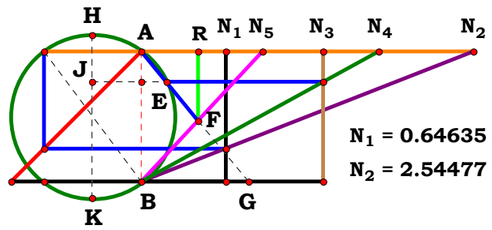
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot A^2 \cdot C \cdot D - 4 \cdot A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot C^2 + B^2 \cdot C^2} - C \cdot (A - B)}{2 \cdot A \cdot C} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot (4 \cdot Y \cdot Z \cdot o \cdot p - 4 \cdot Y^2 \cdot p^2 + Z^2 \cdot o^2) + W \cdot Z^2 \cdot n \cdot o^2 \cdot (W \cdot n - 2 \cdot X \cdot m)} + Z \cdot o \cdot (W \cdot n - X \cdot m)}{2 \cdot X \cdot Z \cdot m \cdot o} = 0$$

4RST2AB6R3



$N_3 = 1.39689$
$N_4 = 1.82070$
$N_5 = 0.92984$
$R = 0.43548$
$N_1 = 0.64635$
$N_2 = 2.54477$

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.54477$ $N_3 := 1.39689$

$N_4 := 1.82070$ $N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

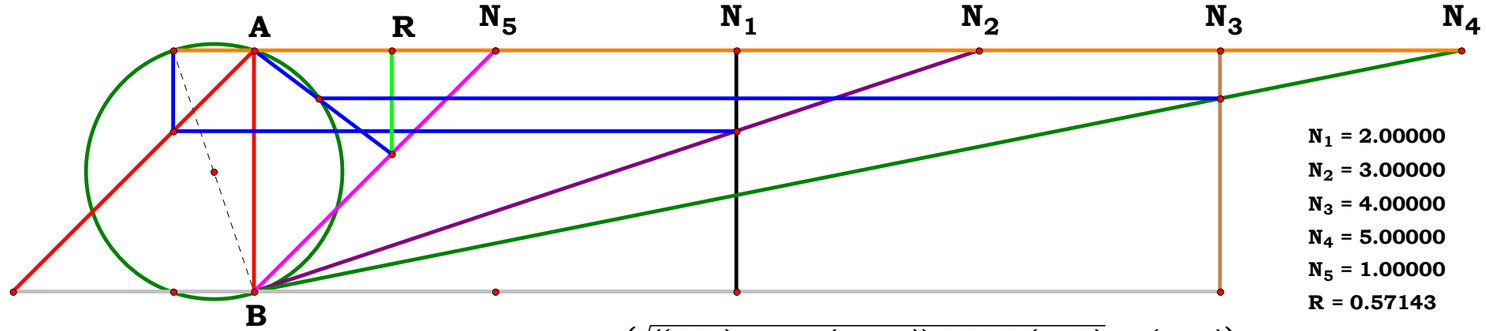
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $HK := \sqrt{AB^2 + AC^2}$

$AL := \frac{N_4 - N_3}{N_4}$ $HJ := AL + \frac{HK - AB}{2}$

$EJ := \sqrt{HJ \cdot (HK - HJ)}$ $BG := -\frac{AB \cdot (AC - 2 \cdot EJ)}{2 \cdot AL}$

$R := \frac{N_5 \cdot BG}{N_5 + BG}$ $R = 0.435482$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
$R = 0.57143$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{\sqrt{N_4^2} \cdot \left(AC \cdot N_4 + 2 \cdot N_3 \cdot N_5 - 2 \cdot N_4 \cdot N_5\right) - N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{N_5 \cdot \left[\sqrt{N_2^2 \cdot N_4^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2)\right]}{\sqrt{N_2^2 \cdot N_4^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2) - 2 \cdot N_2 \cdot N_5 \cdot (N_3 - N_4)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

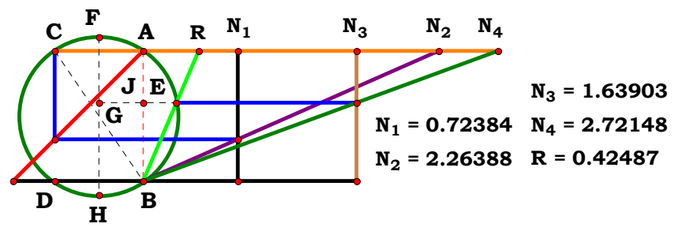
$$R - \frac{N_u \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A - B)^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{C \cdot E \cdot (A - B) - 2 \cdot A \cdot N_u \cdot (C - D) - E \cdot \sqrt{C^2 \cdot (A - B)^2 + 4 \cdot A^2 \cdot D \cdot (C - D)}} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{Y^2 \cdot n^2 \cdot (V \cdot m - W \cdot l)^2 - 4 \cdot W^2 \cdot X \cdot l^2 \cdot o \cdot (X \cdot o - Y \cdot n)} + Y \cdot n \cdot (V \cdot m - W \cdot l)\right]}{p \cdot \sqrt{Y^2 \cdot n^2 \cdot (V \cdot m - W \cdot l)^2 - 4 \cdot W^2 \cdot X \cdot l^2 \cdot o \cdot (X \cdot o - Y \cdot n)} - 2 \cdot W \cdot Z \cdot l \cdot (X \cdot o - Y \cdot n) + Y \cdot n \cdot p \cdot (V \cdot m - W \cdot l)} = 0$$

$$\frac{N_5 \cdot \left(\sqrt{((N_2 \cdot N_4)^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2)) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2)\right)}{\left(\sqrt{((N_2 \cdot N_4)^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2)) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2)\right) - 2 \cdot N_2 \cdot N_5 \cdot (N_3 - N_4)} - R = 0.00000$$

4RST2AB6R4



$N_3 = 1.63903$
$N_1 = 0.72384$ $N_4 = 2.72148$
$N_2 = 2.26388$ $R = 0.42487$

Unit. $AB := 1$ **Given.** $N_1 := .72384$ $N_2 := 2.26388$ $N_3 := 1.63903$ $N_4 := 2.72148$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

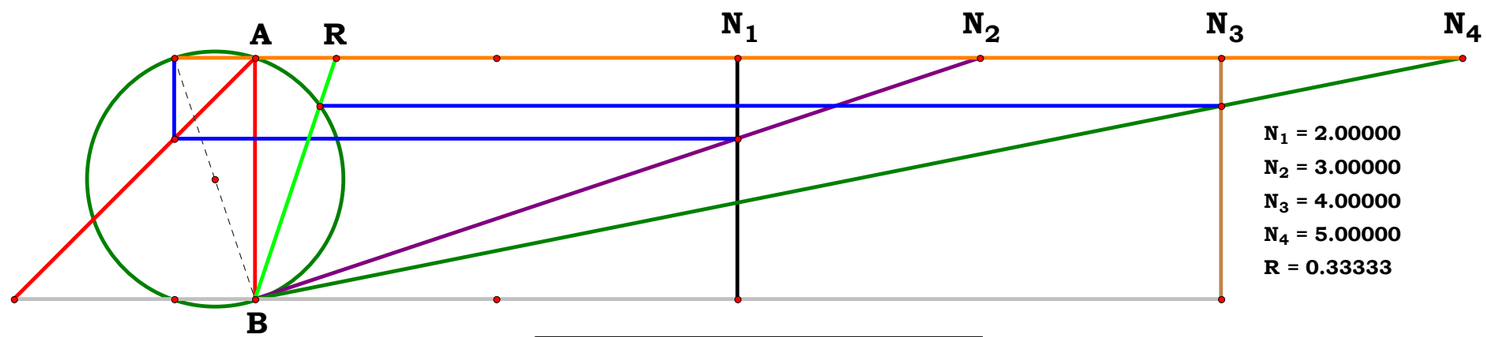
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $AE := \frac{N_4 - N_3}{N_4}$ $BE := AB - AE$

$FH := \sqrt{AB^2 + AC^2}$ $FG := AE + \frac{FH - AB}{2}$

$EG := \sqrt{FG \cdot (FH - FG)}$ $EJ := EG - \frac{AC}{2}$

$R := \frac{EJ \cdot AB}{BE}$ $R = 0.424872$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.33333$

$$\frac{\left(\sqrt{\left(N_2^2 \cdot N_4^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2)\right) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_1 \cdot N_4\right) - N_2 \cdot N_4}{2 \cdot N_2 \cdot N_3} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot N_4 \cdot \sqrt{N_4^2}}{2 \cdot N_3 \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot N_4^2 + N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)} + N_4 \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_3} = 0$$

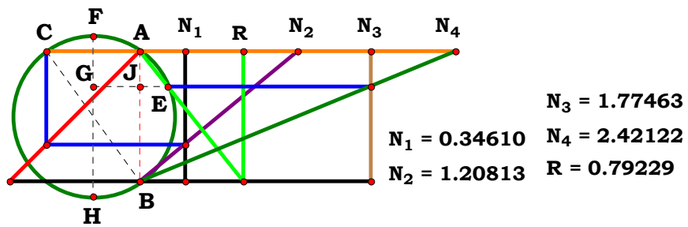
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - C \cdot (A - B)}{2 \cdot A \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2 \cdot o^2 \cdot (W \cdot n - X \cdot m)^2 - 4 \cdot X^2 \cdot Y \cdot m^2 \cdot p \cdot (Y \cdot p - Z \cdot o)} + Z \cdot o \cdot (W \cdot n - X \cdot m)}{2 \cdot X \cdot Y \cdot m \cdot p} = 0$$

4RST2AB6R5



$N_1 = 0.34610$
$N_2 = 1.20813$
$N_3 = 1.77463$
$N_4 = 2.42122$
$R = 0.79229$

Unit. $AB := 1$ Given. $N_1 := .34610$ $N_2 := 1.20813$ $N_3 := 1.77463$ $N_4 := 2.42122$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

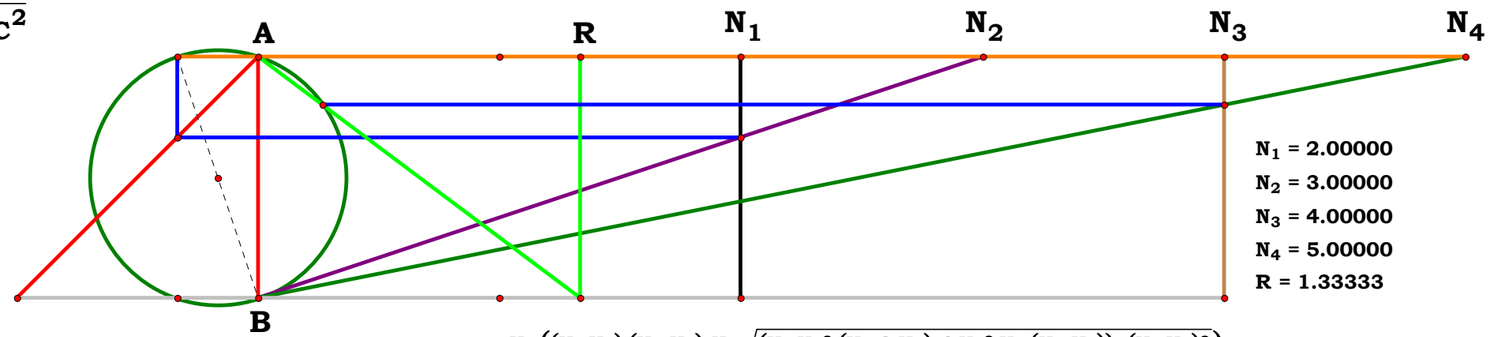
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad AJ := \frac{N_4 - N_3}{N_4} \qquad FH := \sqrt{AB^2 + AC^2}$$

$$FG := AJ + \frac{FH - AB}{2} \qquad EG := \sqrt{FG \cdot (FH - FG)}$$

$$EJ := EG - \frac{AC}{2} \qquad R := \frac{EJ \cdot AB}{AJ} \qquad R = 0.792287$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 1.33333$

$$\frac{N_4 \cdot ((N_2 \cdot N_4) \cdot (N_2 - N_1) - N_2 \cdot \sqrt{(N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4)) + (N_2 \cdot N_4)^2})}{2 \cdot N_2 \cdot (N_2 \cdot N_4) \cdot (N_3 - N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot \left(AC \cdot \sqrt{N_4^2} - \sqrt{AC^2 \cdot N_4^2 - 4 \cdot N_3^2 + 4 \cdot N_3 \cdot N_4}\right)}{2 \cdot (N_3 - N_4) \cdot \sqrt{N_4^2}} = 0$$

$$R - \frac{N_4 \cdot \left[N_2 \cdot N_4 \cdot (N_2 - N_1) - N_2 \cdot \sqrt{N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) - 4 \cdot N_2^2 \cdot N_3 \cdot (N_3 - N_4) + (N_2 \cdot N_4)^2}\right]}{2 \cdot N_2 \cdot (N_2 \cdot N_4) \cdot (N_3 - N_4)} = 0$$

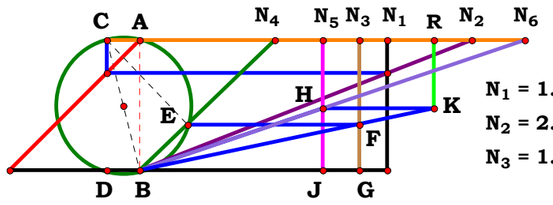
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{C^2 \cdot (A - B)^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - C \cdot (A - B)}{2 \cdot A \cdot (C - D)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{W \cdot Z^2 \cdot n \cdot o^2 \cdot (W \cdot n - 2 \cdot X \cdot m) + 4 \cdot X^2 \cdot Y \cdot m^2 \cdot p \cdot (Z \cdot o - Y \cdot p) + X^2 \cdot Z^2 \cdot m^2 \cdot o^2} + Z \cdot o \cdot (W \cdot n - X \cdot m)}{2 \cdot X \cdot m \cdot (Z \cdot o - Y \cdot p)} = 0$$

4RST2AB6R6



$N_1 = 1.89582$
$N_2 = 2.54477$
$N_3 = 1.68746$
$N_4 = 1.03615$
$N_5 = 1.40444$
$N_6 = 2.95416$
$R = 2.26093$

Unit. $AB := 1$ **Given.** $N_1 := 1.89582$ $N_2 := 2.54477$ $N_3 := 1.68746$ $N_4 := 1.03615$ $N_5 := 1.40444$ $N_6 := 2.95416$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

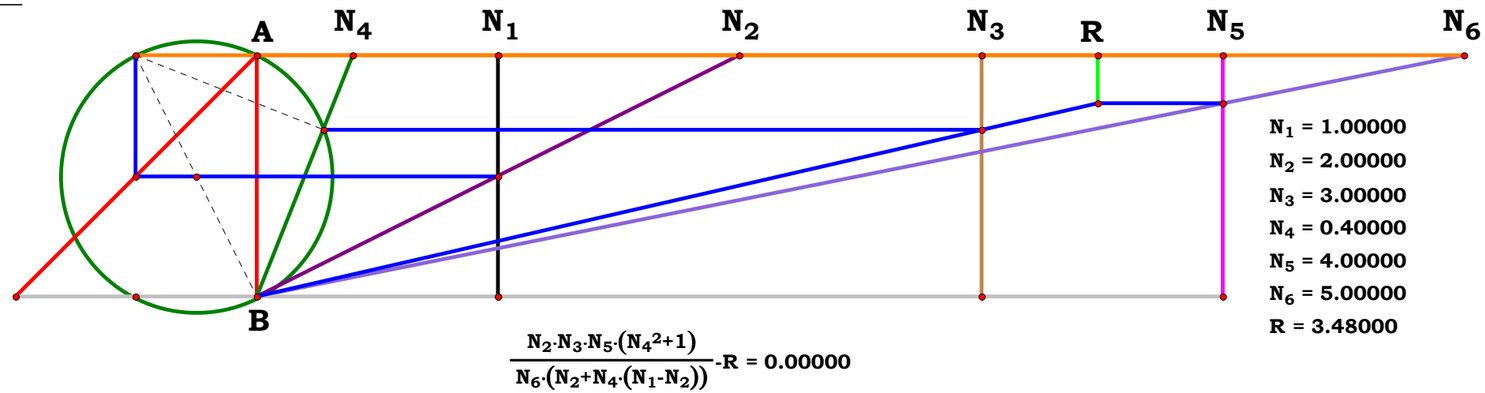
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $HN_5 := \frac{N_6 - N_5}{N_6}$ $HJ := AB - HN_5$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $CN_4 := N_4 + AC$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $FG := \frac{AB \cdot BE}{BN_4}$

$R := \frac{N_3 \cdot HJ}{FG}$ $R = 2.260935$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 0.40000$
$N_5 = 4.00000$
$N_6 = 5.00000$
$R = 3.48000$

$\frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2+1)}{N_6 \cdot (N_2+N_4 \cdot (N_1-N_2))} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 - AC \cdot N_4 \cdot N_6} = 0$

$R - \frac{N_2 \cdot N_3 \cdot N_5 \cdot \left(N_4^2 + 1\right)}{N_6 \cdot \left[N_2 + N_4 \cdot \left(N_1 - N_2\right)\right]} = 0$

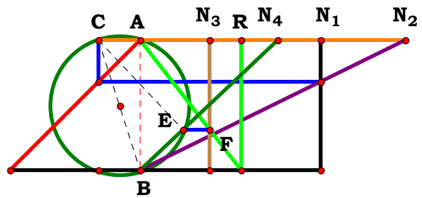
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$R - \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u^2\right)}{C \cdot D \cdot E \cdot \left[A \cdot D - N_u \cdot (A - B)\right]} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{V \cdot W \cdot Y \cdot k \cdot p \cdot \left(X^2 + n^2\right)}{V \cdot Z \cdot k \cdot m \cdot n^2 \cdot o + X \cdot Z \cdot m \cdot n \cdot o \cdot (U \cdot l - V \cdot k)} = 0$

4RST2AB6R7



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.53485$
$N_4 = 1.05552$
$R = 0.77912$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .53485$ $N_4 := 1.05552$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

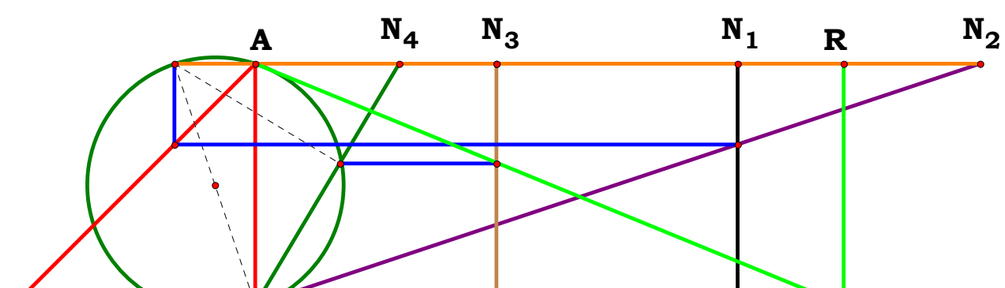
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$FN_3 := \frac{AB \cdot EN_4}{BN_4}$ $R := \frac{N_3 \cdot AB}{FN_3}$ $R = 0.779113$



Definitions.

$$R - \frac{N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot (AC + N_4)} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_4^2 + 1\right)}{N_4 \cdot (N_2 - N_1 + N_2 \cdot N_4)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot \left(D^2 + N_u^2\right)}{C \cdot \left[D \cdot (A - B) + A \cdot N_u\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

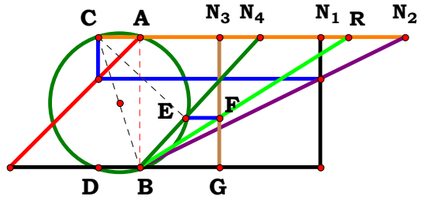
$$R - \frac{X \cdot Y \cdot m \cdot \left(Z^2 + p^2\right)}{X \cdot Z^2 \cdot m \cdot o - Z \cdot o \cdot p \cdot (W \cdot n - X \cdot m)} = 0$$

B

$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.59870$
$R = 2.43445$

$$\frac{N_2 \cdot N_3 \cdot (N_4^2 + 1)}{N_4 \cdot ((N_2 - N_1) + N_2 \cdot N_4)} - R = 0.00000$$

4RST2AB6R8



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.61234$
$N_4 = 0.91992$
$R = 1.60104$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .61234$ $N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

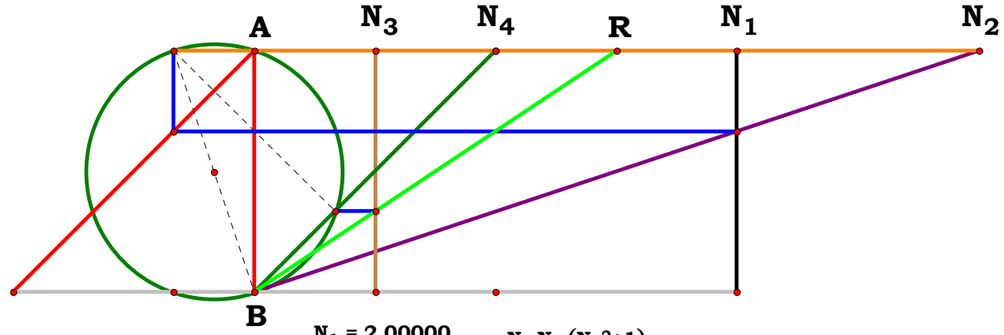
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $R := \frac{N_3 \cdot BN_4}{BE}$

$R = 1.601038$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.50000$
$N_4 = 1.00000$
$R = 1.50000$

$\frac{N_2 \cdot N_3 \cdot (N_4^2+1)}{N_2+N_4 \cdot (N_1-N_2)} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot (N_4^2 + 1)}{1 - AC \cdot N_4} = 0$

$R - \frac{N_2 \cdot N_3 \cdot (N_4^2 + 1)}{N_2 + N_4 \cdot (N_1 - N_2)} = 0$

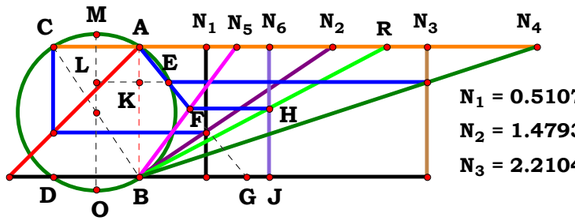
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{A \cdot N_u \cdot (D^2 + N_u^2)}{C \cdot D \cdot [A \cdot D - N_u \cdot (A - B)]} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X \cdot Y \cdot m \cdot (Z^2 + p^2)}{o \cdot p \cdot (W \cdot Z \cdot n - X \cdot Z \cdot m + X \cdot m \cdot p)} = 0$

4RST2AB6R9



$N_1 = 0.51075$ $N_4 = 3.05079$

$N_2 = 1.47933$ $N_5 = 0.74581$

$N_3 = 2.21049$ $N_6 = 0.99764$

$R = 1.90254$

Unit. $AB := 1$ **Given.** $N_1 := .51075$ $N_2 := 1.47933$ $N_3 := 2.21049$

$N_4 := 3.05079$ $N_5 := .74581$ $N_6 := .99764$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

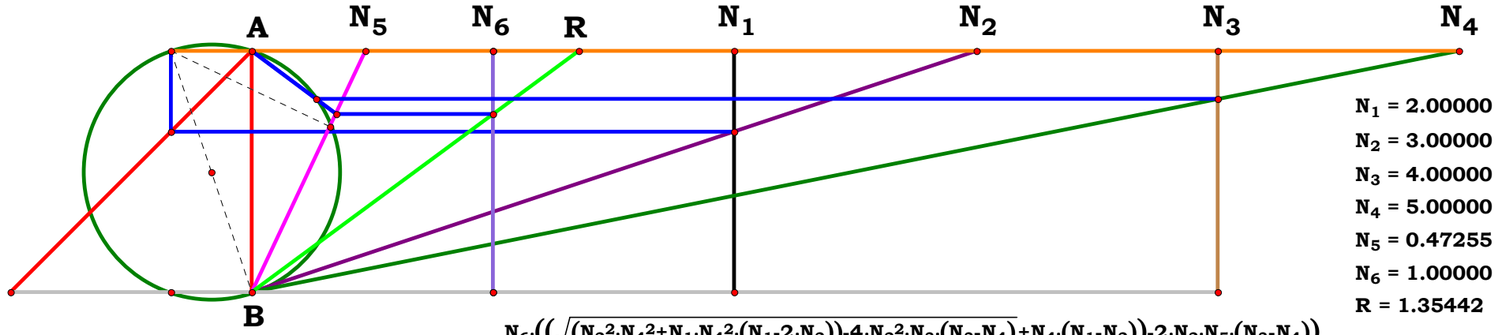
$AC := \frac{N_2 - N_1}{N_2}$ $AK := \frac{N_4 - N_3}{N_4}$

$MO := \sqrt{AB^2 + AC^2}$ $ML := AK + \frac{MO - AB}{2}$

$EL := \sqrt{ML \cdot (MO - ML)}$ $EK := EL - \frac{AC}{2}$

$BG := \frac{EK \cdot AB}{AK}$ $HJ := \frac{BG}{BG + N_5}$

$R := \frac{N_6}{HJ}$ $R = 1.902555$



$N_1 = 2.00000$

$N_2 = 3.00000$

$N_3 = 4.00000$

$N_4 = 5.00000$

$N_5 = 0.47255$

$N_6 = 1.00000$

$R = 1.35442$

$$\frac{N_6\cdot\left(\left(\sqrt{\left(N_2^2\cdot N_4^2+N_1\cdot N_4^2\cdot\left(N_1-2\cdot N_2\right)\right)-4\cdot N_2^2\cdot N_3\cdot\left(N_3-N_4\right)}+N_4\cdot\left(N_1-N_2\right)\right)-2\cdot N_2\cdot N_5\cdot\left(N_3-N_4\right)\right)}{\left(\sqrt{\left(N_2^2\cdot N_4^2+N_1\cdot N_4^2\cdot\left(N_1-2\cdot N_2\right)\right)-4\cdot N_2^2\cdot N_3\cdot\left(N_3-N_4\right)}+N_1\cdot N_4\right)-N_2\cdot N_4}-R = 0.00000$$

Definitions.

$$R - \frac{N_6\cdot\left[\sqrt{N_4^2}\cdot\left(AC\cdot N_4+2\cdot N_3\cdot N_5-2\cdot N_4\cdot N_5\right)-N_4\cdot\sqrt{AC^2\cdot N_4^2-4\cdot N_3^2+4\cdot N_3\cdot N_4}\right]}{N_4\cdot\left(AC\cdot\sqrt{N_4^2}-\sqrt{AC^2\cdot N_4^2-4\cdot N_3^2+4\cdot N_3\cdot N_4}\right)} = 0$$

$$R - \frac{N_6\cdot\left[\sqrt{N_2^2\cdot N_4^2+N_1\cdot N_4^2\cdot\left(N_1-2\cdot N_2\right)-4\cdot N_2^2\cdot N_3\cdot\left(N_3-N_4\right)}+N_4\cdot\left(N_1-N_2\right)-2\cdot N_2\cdot N_5\cdot\left(N_3-N_4\right)\right]}{\sqrt{N_2^2\cdot N_4^2+N_1\cdot N_4^2\cdot\left(N_1-2\cdot N_2\right)-4\cdot N_2^2\cdot N_3\cdot\left(N_3-N_4\right)}+N_1\cdot N_4-N_2\cdot N_4} = 0$$

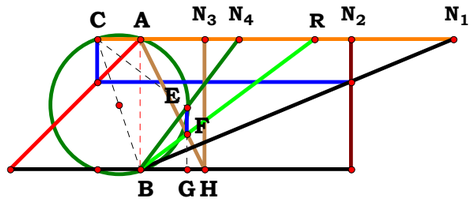
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u\cdot\left[A\cdot C\cdot E-E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\cdot E-2\cdot A\cdot N_u\cdot(C-D)\right]}{E\cdot F\cdot\left[A\cdot C-\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z\cdot\left[o\cdot\sqrt{4\cdot V^2\cdot W\cdot k^2\cdot n\cdot(X\cdot m-W\cdot n)+X^2\cdot m^2\cdot(U\cdot l-V\cdot k)^2}-2\cdot V\cdot Y\cdot k\cdot(W\cdot n-X\cdot m)+X\cdot m\cdot o\cdot(U\cdot l-V\cdot k)\right]}{o\cdot p\cdot\left[\sqrt{4\cdot V^2\cdot W\cdot k^2\cdot n\cdot(X\cdot m-W\cdot n)+X^2\cdot m^2\cdot(U\cdot l-V\cdot k)^2}+X\cdot m\cdot(U\cdot l-V\cdot k)\right]} = 0$$

4RST3AB1R0



$N_1 = 2.39948$
$N_2 = 1.61493$
$N_3 = 0.49611$
$N_4 = 0.75526$
$R = 1.34142$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.61493$ $N_3 := 0.49611$ $N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

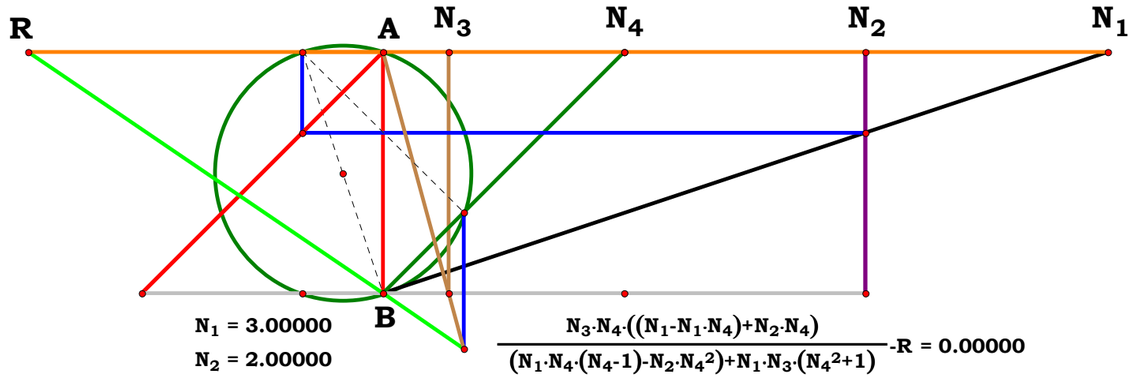
Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad CN_4 := N_4 + AC \qquad BN_4 := \sqrt{N_4^2 + AB^2}$$

$$EN_4 := \frac{N_4 \cdot CN_4}{BN_4} \qquad BE := BN_4 - EN_4$$

$$BG := \frac{N_4 \cdot BE}{BN_4} \qquad FG := \frac{AB \cdot (N_3 - BG)}{N_3}$$

$$R := \frac{BG \cdot AB}{FG} \qquad R = 1.341417$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.27178$
$N_4 = 1.00000$
$R = -1.47179$

$$\frac{N_3 \cdot N_4 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4)}{(N_1 \cdot N_4 \cdot (N_4 - 1) - N_2 \cdot N_4^2) + N_1 \cdot N_3 \cdot (N_4^2 + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC \cdot N_4 - 1)}{N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_1 \cdot N_4 + N_2 \cdot N_4)}{N_1 \cdot N_4 \cdot (N_4 - 1) - N_2 \cdot N_4^2 + N_1 \cdot N_3 \cdot (N_4^2 + 1)} = 0$$

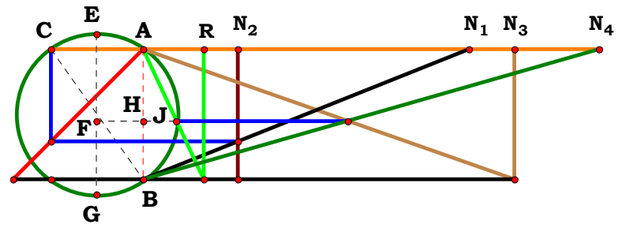
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot [B \cdot D + N_u \cdot (A - B)]}{B \cdot N_u^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (X \cdot Z \cdot m - W \cdot Z \cdot n + W \cdot n \cdot p)}{Y \cdot W \cdot n \cdot (Z^2 + p^2) + [W \cdot Z \cdot n \cdot o \cdot (Z - p) - X \cdot Z^2 \cdot m \cdot o]} = 0$$

4RST3AB1R1



$N_1 = 2.49634$
$N_2 = 0.72384$
$N_3 = 2.84976$
$N_4 = 3.49634$
$R = 0.46480$

Unit. $AB := 1$ Given. $N_1 := 2.49634$ $N_2 := .72384$ $N_3 := 2.84976$ $N_4 := 3.49634$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

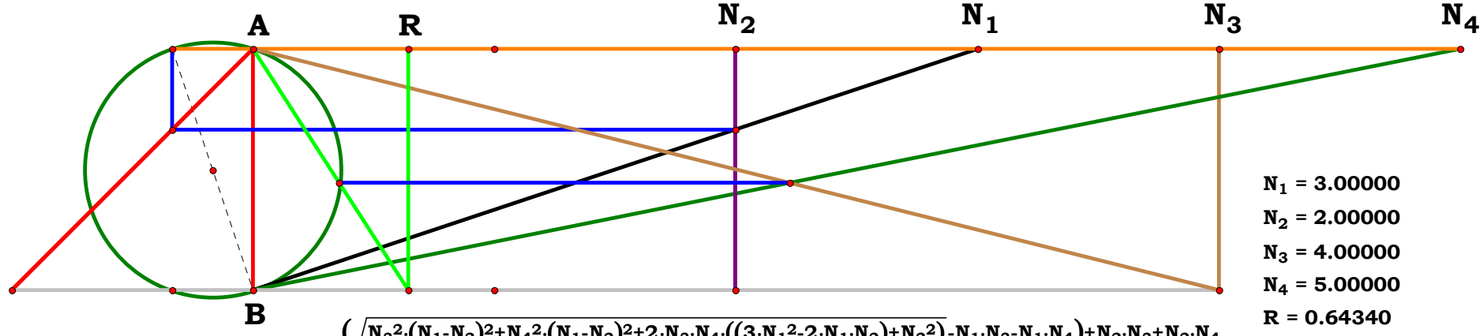
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad AH := \frac{AB \cdot N_4}{N_4 + N_3} \qquad EG := \sqrt{AB^2 + AC^2}$$

$$EF := AH + \frac{(EG - AB)}{2} \qquad FJ := \sqrt{EF \cdot (EG - EF)}$$

$$HJ := FJ - \frac{AC}{2} \qquad R := \frac{HJ \cdot AB}{AH} \qquad R = 0.464804$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.64340$

$$\frac{\left(\sqrt{N_3^2 \cdot (N_1 - N_2)^2 + N_4^2 \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot \left((3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2) + N_2^2\right)} - N_1 \cdot N_3 - N_1 \cdot N_4\right) + N_2 \cdot N_3 + N_2 \cdot N_4}{2 \cdot N_1 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{\left(N_3^2 + N_4^2\right) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot \left(3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2\right)} - (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot N_4} = 0$$

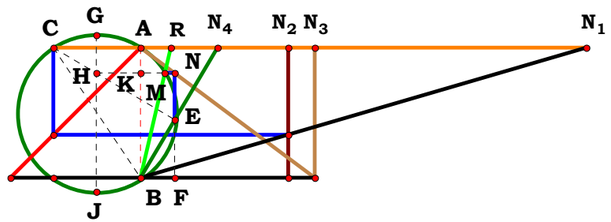
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{(C + D) \cdot (A - B) + \sqrt{\left(C^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}}{2 \cdot B \cdot C} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot \left(Y^2 \cdot p^2 + 6 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2\right) + X \cdot m \cdot (Y \cdot p + Z \cdot o)^2 \cdot (X \cdot m - 2 \cdot W \cdot n)} - (Y \cdot p + Z \cdot o) \cdot (W \cdot n - X \cdot m)}{2 \cdot W \cdot Z \cdot n \cdot o} = 0$$

4RST3AB1R2



$N_1 = 3.41649$
$N_2 = 1.13064$
$N_3 = 1.33877$
$N_4 = 0.59060$
$R = 0.23145$

Unit. $AB := 1$ Given. $N_1 := 3.41649$ $N_2 := 1.13064$ $N_3 := 1.33877$ $N_4 := .59060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_4 := N_4 + AC$

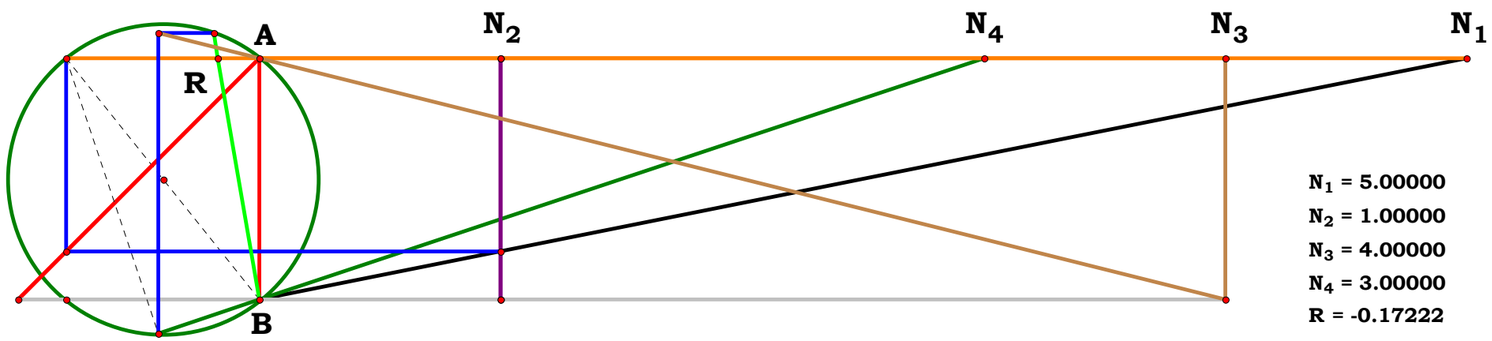
$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BF := \frac{N_4 \cdot (BN_4 - EN_4)}{BN_4}$ $AK := \frac{AB \cdot BF}{N_3}$

$GJ := \sqrt{AB^2 + AC^2}$ $GH := AK + \frac{GJ - AB}{2}$

$HM := \sqrt{GH \cdot (GJ - GH)}$ $KM := HM - \frac{AC}{2}$

$R := \frac{KM \cdot AB}{AB - AK}$ $R = 0.23145$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = -0.17222$

$$\frac{(((\sqrt{4 \cdot N_4 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4) \cdot ((((N_1 - N_2) + N_1 \cdot N_3) \cdot N_4^2 - N_1 \cdot N_4) + N_1 \cdot N_3) + N_3^2 \cdot (N_4^2 + 1)^2 \cdot (N_1 - N_2)^2} - N_1 \cdot N_3) + N_2 \cdot N_3) - N_1 \cdot N_3 \cdot N_4^2) + N_2 \cdot N_3 \cdot N_4^2}{2 \cdot ((((N_1 \cdot N_4^2 - N_2 \cdot N_4^2) + N_1 \cdot N_3) - N_1 \cdot N_4) + N_1 \cdot N_3 \cdot N_4^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_4^2 + 1) \cdot \left[AC \cdot \sqrt{\left[N_3 \cdot (N_4^2 + 1)\right]^2} - \sqrt{AC \cdot N_3 \cdot N_4^2 \cdot (2 \cdot AC \cdot N_3 - 4 \cdot N_4^2 + AC \cdot N_3 \cdot N_4^2 - 4) + AC^2 \cdot N_3^2 - 4 \cdot AC \cdot N_4^3 \cdot (AC \cdot N_4 - 2) + 4 \cdot N_3 \cdot N_4 \cdot (N_4^2 + 1) - 4 \cdot N_4^2}\right]}{2 \cdot \sqrt{\left[N_3 \cdot (N_4^2 + 1)\right]^2} \cdot (N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2)} = 0$$

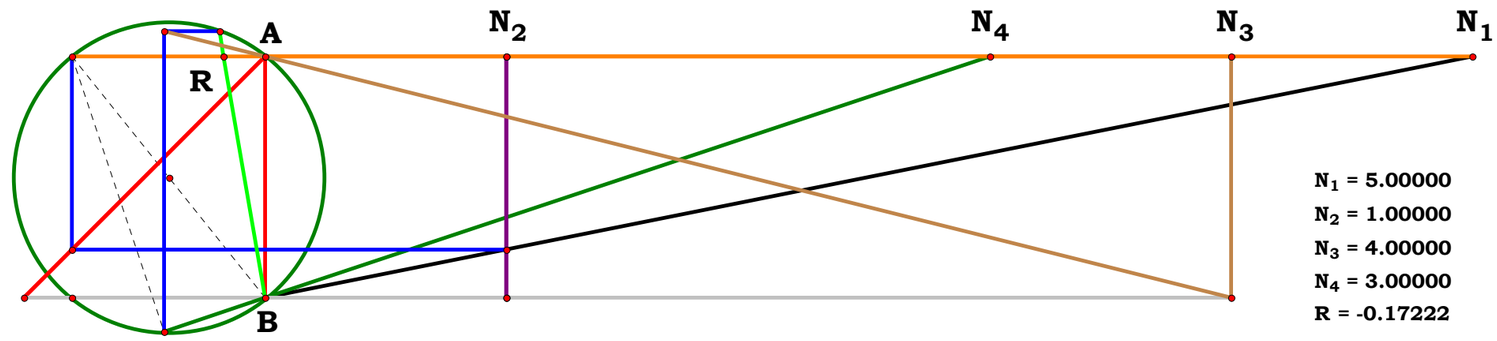
$$R - \frac{\sqrt{4 \cdot N_4 \cdot (N_1 - N_1 \cdot N_4 + N_2 \cdot N_4) \cdot \left[(N_1 - N_2 + N_1 \cdot N_3) \cdot N_4^2 - N_1 \cdot N_4 + N_1 \cdot N_3\right] + N_3^2 \cdot (N_4^2 + 1)^2 \cdot (N_1 - N_2)^2} - N_3 \cdot (N_4^2 + 1) \cdot (N_1 - N_2)}{2 \cdot (N_1 \cdot N_4^2 - N_2 \cdot N_4^2 + N_1 \cdot N_3 - N_1 \cdot N_4 + N_1 \cdot N_3 \cdot N_4^2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(D^2 + N_u^2) \cdot (B - A) - \sqrt{(D^2 + N_u^2)^2 \cdot (A - B)^2 - 4 \cdot C^2 \cdot \left[B \cdot D + N_u \cdot (A - B)\right]^2 + 4 \cdot B \cdot C \cdot (D^2 + N_u^2) \cdot (B \cdot D + A \cdot N_u - B \cdot N_u)}}{2 \cdot (B \cdot C \cdot D - B \cdot N_u^2 - B \cdot D^2 + A \cdot C \cdot N_u - B \cdot C \cdot N_u)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{Y^2 \cdot \left(Z^2 + p^2\right)^2 \cdot (W \cdot n - X \cdot m)^2 + 4 \cdot Z \cdot o \cdot (X \cdot Z \cdot m - W \cdot Z \cdot n + W \cdot n \cdot p) \cdot \left[Z^2 \cdot (W \cdot Y \cdot n + W \cdot n \cdot o - X \cdot m \cdot o) + W \cdot n \cdot p \cdot (Y \cdot p - Z \cdot o)\right]} - Y \cdot \left(Z^2 + p^2\right) \cdot (W \cdot n - X \cdot m)}{2 \cdot \left(W \cdot Y \cdot Z^2 \cdot n + W \cdot Y \cdot n \cdot p^2 + W \cdot Z^2 \cdot n \cdot o - X \cdot Z^2 \cdot m \cdot o - W \cdot Z \cdot n \cdot o \cdot p\right)} = 0$$



$$\frac{\left(\left(\sqrt{4 \cdot N_4 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4) \cdot ((((N_1 - N_2) + N_1 \cdot N_3) \cdot N_4^2 - N_1 \cdot N_4) + N_1 \cdot N_3) + N_3^2 \cdot (N_4^2 + 1)^2 \cdot (N_1 - N_2)^2} - N_1 \cdot N_3\right) + N_2 \cdot N_3\right) - N_1 \cdot N_3 \cdot N_4^2) + N_2 \cdot N_3 \cdot N_4^2}{2 \cdot ((((N_1 \cdot N_4^2 - N_2 \cdot N_4^2) + N_1 \cdot N_3) - N_1 \cdot N_4) + N_1 \cdot N_3 \cdot N_4^2)} - R = 0.00000$$

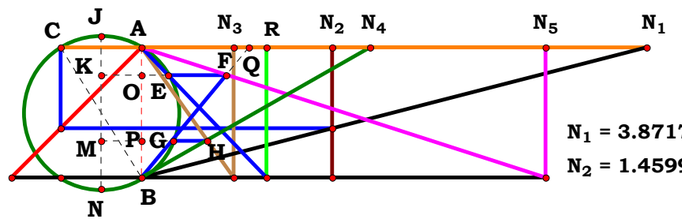
4RST3AB1R3

Unit.

$AB := 1$

Given.

$N_1 := 3.87172$ $N_2 := 1.45996$ $N_3 := .70920$ $N_4 := 1.75290$ $N_5 := 3.09945$



$N_1 = 3.87172$
$N_2 = 1.45996$

$N_3 = 0.70920$
$N_4 = 1.75290$
$N_5 = 3.09945$
$R = 0.95741$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4} \qquad JN := \sqrt{AB^2 + AC^2}$$

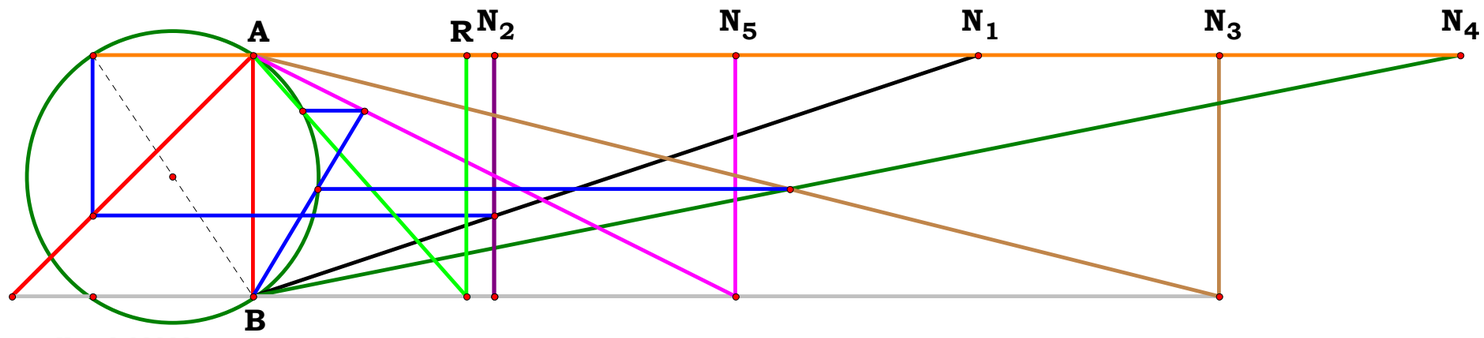
$$JM := JN - \left(BP + \frac{JN - AB}{2}\right) \qquad GM := \sqrt{JM \cdot (JN - JM)}$$

$$PG := GM - \frac{AC}{2} \qquad AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad R := \frac{EO \cdot AB}{AO}$$

$R = 0.957407$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 0.88542$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.44444$
$JN = 1.20185$
$JM = 0.65648$
$GM = 0.59835$

$PG = 0.26502$
$AQ = 0.59629$
$AO = 0.22967$
$JK = 0.33060$
$EK = 0.53669$
$EO = 0.20335$

$R - \frac{EO \cdot AB}{AO} = 0.00000$

$$AC - \frac{N_1 - N_2}{N_1} = 0 \qquad BP - \frac{N_3}{N_3 + N_4} = 0 \qquad JN - \frac{\sqrt{2 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2}}{N_1} = 0 \qquad JM - \frac{\sqrt{2 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2} \cdot (N_3 + N_4) - N_1 \cdot (N_3 - N_4)}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$GM - \frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) - N_2 \cdot (N_3 + N_4)^2 \cdot (2 \cdot N_1 - N_2)}}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0 \qquad PG - \frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) - N_2 \cdot (N_3 + N_4)^2 \cdot (2 \cdot N_1 - N_2)} - (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$AQ - \left[\frac{\left[\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_2 \cdot (N_3 + N_4)^2 \cdot (N_2 - 2 \cdot N_1)} - (N_3 + N_4) \cdot (N_1 - N_2)\right]}{2 \cdot N_1 \cdot N_3}\right] = 0$$

$$AO - \frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_2 \cdot (N_3 + N_4)^2 \cdot (N_2 - 2 \cdot N_1)} - (N_3 + N_4) \cdot (N_1 - N_2)}{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_2 \cdot (N_3 + N_4)^2 \cdot (N_2 - 2 \cdot N_1)} - (N_3 + N_4) \cdot (N_1 - N_2) + 2 \cdot N_1 \cdot N_3 \cdot N_5} = 0$$

Etc.

4RST3AB1R4

Unit.

$AB := 1$

Given.

$N_1 := 5.29553$

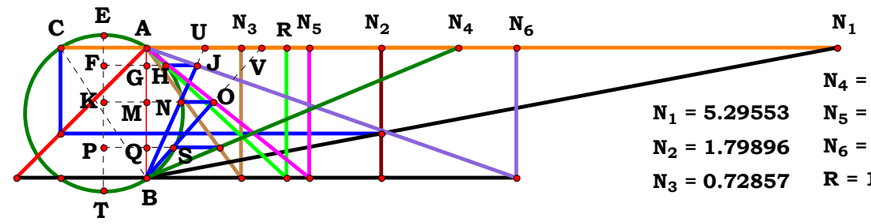
$N_2 := 1.79896$

$N_3 := .72857$

$N_4 := 2.39216$

$N_5 := 1.24947$

$N_6 := 2.83793$



N_1 = 5.29553 N_4 = 2.39216

N_2 = 1.79896 N_5 = 1.24947

N_3 = 0.72857 N_6 = 2.83793

R = 1.07055

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

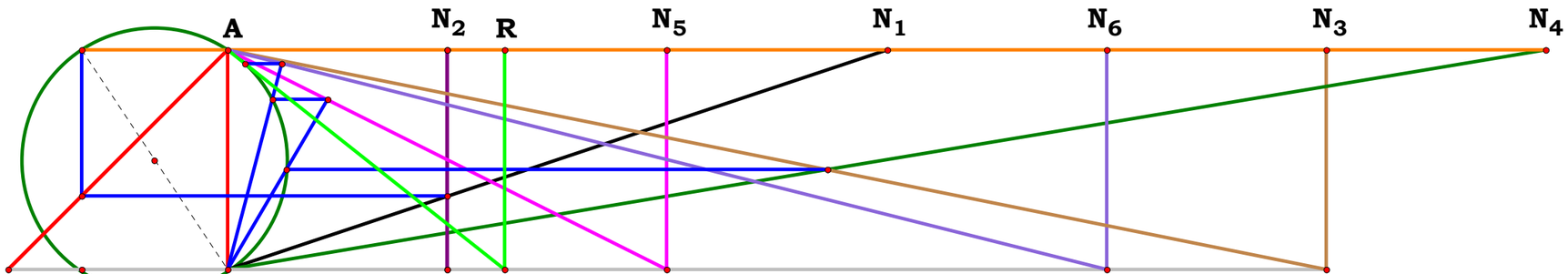
$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 1.070553$



N_1 = 3.00000 AB = 1.00000 AV = 0.58491 AG = 0.06117

N_2 = 1.00000 AC = 0.66667 BM = 0.77372 EF = 0.16209

N_3 = 5.00000 BQ = 0.45455 KT = 0.87465 FH = 0.41053

N_4 = 6.00000 ET = 1.20185 KN = 0.53497 GH = 0.07720

N_5 = 2.00000 EP = 0.64638 MN = 0.20163 $R - \frac{GH \cdot AB}{AG}$ = 0.00000

N_6 = 4.00000 PS = 0.59920 AU = 0.26060

R = 1.26211 QS = 0.26587 BG = 0.93883

Definitions.

4RST3AB1R5

Unit.

$AB := 1$

Given.

$N_1 := 3.59083$

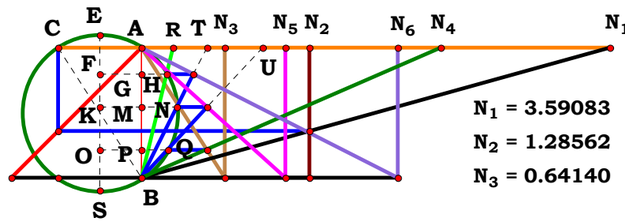
$N_2 := 1.28562$

$N_3 := .64140$

$N_4 := 2.29530$

$N_5 := 1.10418$

$N_6 := 1.96621$



$N_1 = 3.59083$
$N_2 = 1.28562$
$N_3 = 0.64140$
$N_4 = 2.29530$
$N_5 = 1.10418$
$N_6 = 1.96621$
$R = 0.24242$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

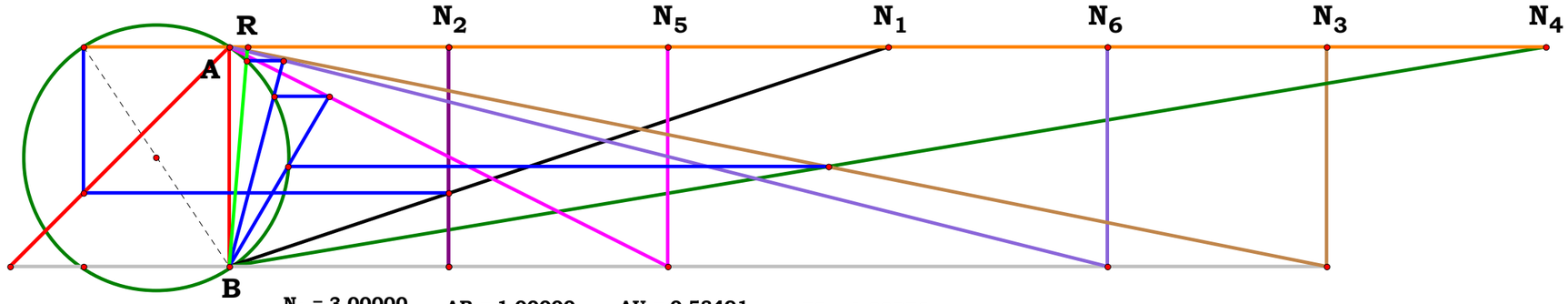
$$KN := \sqrt{KS \cdot (ES - KS)}$$

$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.242424$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 5.00000$
$N_4 = 6.00000$
$N_5 = 2.00000$
$N_6 = 4.00000$
$R = 0.08223$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.45455$
$ES = 1.20185$
$OS = 0.55547$
$OQ = 0.59920$
$PQ = 0.26587$

$AU = 0.58491$
$BM = 0.77372$
$KS = 0.87465$
$KN = 0.53497$
$MN = 0.20163$
$AT = 0.26060$
$BG = 0.93883$

$FS = 1.03976$
$FH = 0.41053$
$GH = 0.07720$
$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

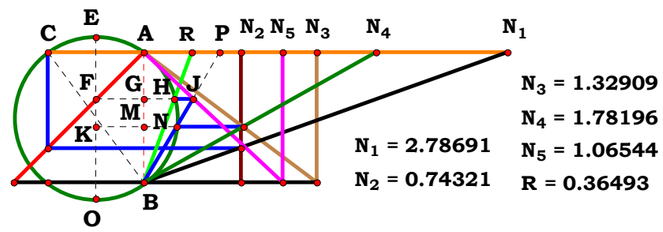
4RST3AB1R6

Unit.

$AB := 1$

Given.

$N_1 := 2.78691$ $N_2 := .74321$ $N_3 := 1.32909$ $N_4 := 1.78196$ $N_5 := 1.06544$



$N_1 = 2.78691$
$N_2 = 0.74321$
$N_3 = 1.32909$
$N_4 = 1.78196$
$N_5 = 1.06544$
$R = 0.36493$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BM := \frac{N_3 \cdot AB}{N_3 + N_4}$

$EO := \sqrt{AB^2 + AC^2}$ $KO := BM + \frac{EO - AB}{2}$

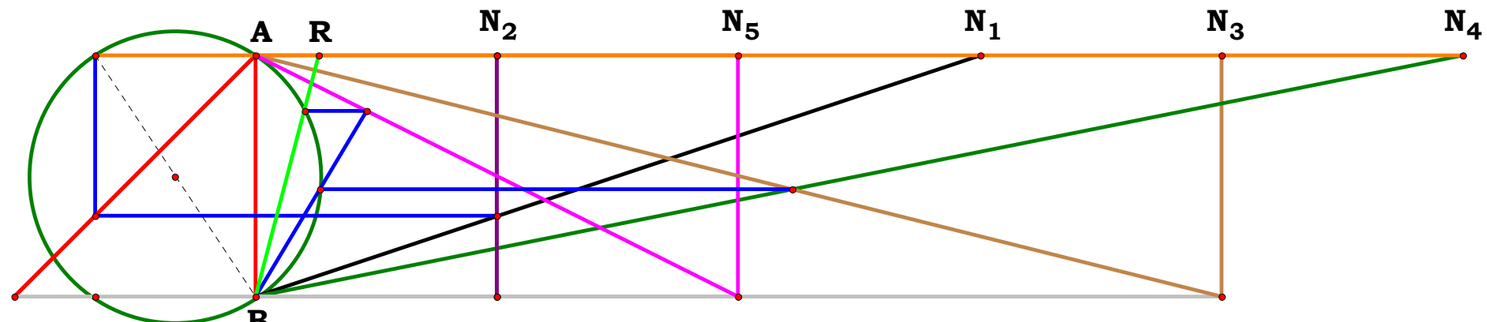
$KN := \sqrt{KO \cdot (EO - KO)}$ $MN := KN - \frac{AC}{2}$

$AP := \frac{MN \cdot AB}{BM}$ $BG := \frac{N_5 \cdot AB}{AP + N_5}$

$FO := BG + \frac{EO - AB}{2}$ $FH := \sqrt{FO \cdot (EO - FO)}$

$GH := FH - \frac{AC}{2}$ $R := \frac{GH \cdot AB}{BG}$

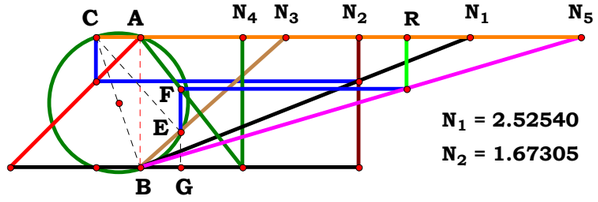
$R = 0.364931$



$N_1 = 3.00000$ $AB = 1.00000$ $MN = 0.26502$
$N_2 = 1.00000$ $AC = 0.66667$ $AP = 0.59629$ $R - \frac{GH \cdot AB}{BG} = 0.00000$
$N_3 = 4.00000$ $BM = 0.44444$ $BG = 0.77033$
$N_4 = 5.00000$ $EO = 1.20185$ $FO = 0.87125$
$N_5 = 2.00000$ $KO = 0.54537$ $FH = 0.53669$
$R = 0.26398$ $KN = 0.59835$ $GH = 0.20335$

Definitions.

4RST3AB1R7



$N_3 = 1.11600$
$N_4 = 0.78432$
$N_5 = 3.38034$
$R = 2.04513$

$N_1 = 2.52540$
$N_2 = 1.67305$

Unit. $AB := 1$ **Given.** $N_1 := 2.52540$ $N_2 := 1.67305$ $N_3 := 1.11600$ $N_4 := .78432$ $N_5 := 3.38034$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

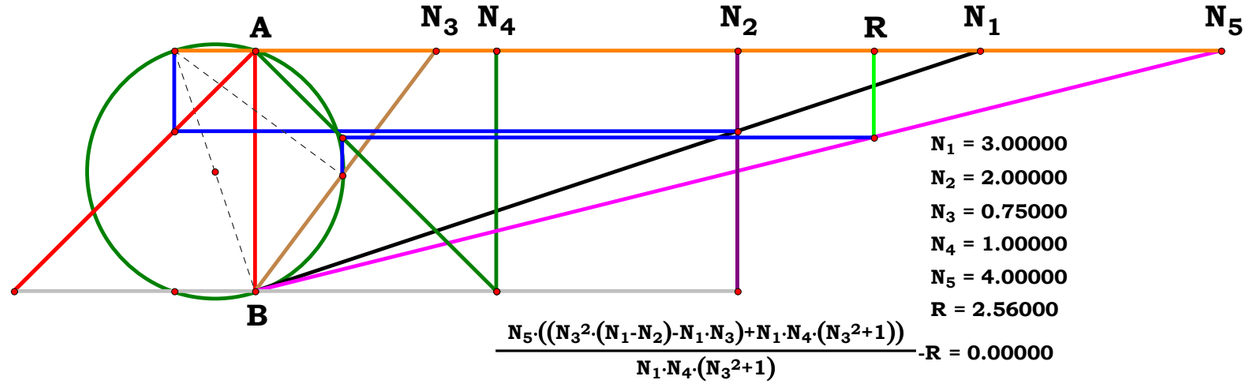
$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_3 := N_3 + AC$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$

$FG := \frac{AB \cdot (N_4 - BG)}{N_4}$ $R := \frac{N_5 \cdot FG}{AB}$ $R = 2.045128$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.75000$
$N_4 = 1.00000$
$N_5 = 4.00000$
$R = 2.56000$

$\frac{N_5 \cdot ((N_3^2 \cdot (N_1 - N_2) - N_1 \cdot N_3) + N_1 \cdot N_4 \cdot (N_3^2 + 1))}{N_1 \cdot N_4 \cdot (N_3^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{N_5 \cdot \left(N_4 - N_3 + N_3^2 \cdot N_4 + AC \cdot N_3^2\right)}{N_4 \cdot \left(N_3^2 + 1\right)} = 0$$

$$R - \frac{N_5 \cdot \left[N_3^2 \cdot (N_1 - N_2) - N_1 \cdot N_3 + N_1 \cdot N_4 \cdot \left(N_3^2 + 1\right)\right]}{N_1 \cdot N_4 \cdot \left(N_3^2 + 1\right)} = 0$$

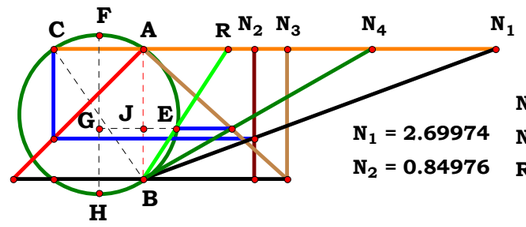
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u^3 + N_u^2 \cdot D \cdot (B - A) + N_u \cdot B \cdot C \cdot (C - D)}{B \cdot E \cdot \left(C^2 + N_u^2\right)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[Y \cdot V \cdot m \cdot \left(X^2 + n^2\right) + X^2 \cdot o \cdot (V \cdot m - W \cdot l) - V \cdot X \cdot m \cdot n \cdot o\right]}{V \cdot Y \cdot m \cdot p \cdot \left(X^2 + n^2\right)} = 0$$

4RST3AB1R8



$N_3 = 1.10631$
$N_4 = 1.75290$
$N_1 = 2.69974$
$N_2 = 0.84976$
$R = 0.65352$

Unit. $AB := 1$ **Given.** $N_1 := 2.69974$ $N_2 := .84979$ $N_3 := 1.10631$ $N_4 := 1.75290$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

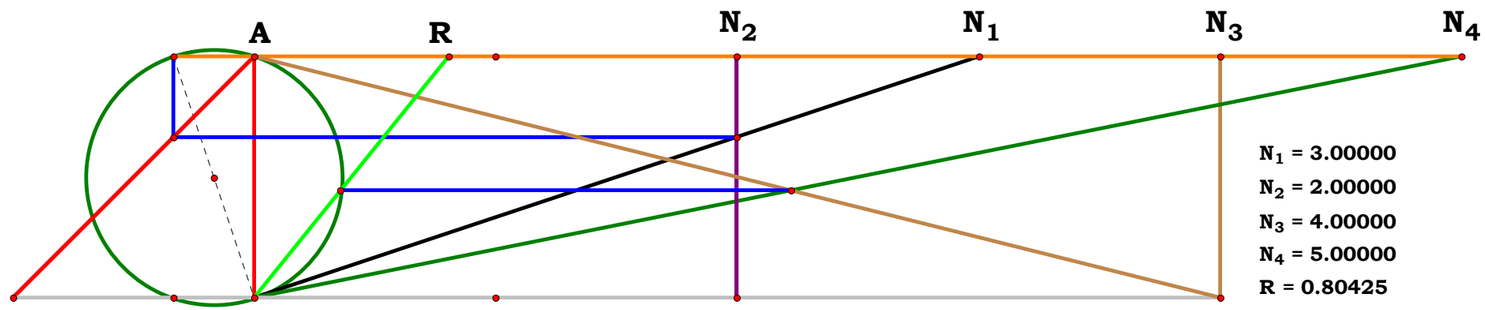
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BJ := \frac{AB \cdot N_3}{N_3 + N_4}$ $FH := \sqrt{AB^2 + AC^2}$

$GH := BJ + \frac{FH - AB}{2}$ $GE := \sqrt{GH \cdot (FH - GH)}$

$JE := GE - \frac{AC}{2}$ $R := \frac{JE \cdot AB}{BJ}$ $R = 0.653525$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.80425$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{(N_3^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2)} - (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(C + D) \cdot (A - B) + \sqrt{(C^2 + D^2) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot (A^2 - 2 \cdot A \cdot B + 3 \cdot B^2)}}{2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{(Y \cdot p + Z \cdot o) \cdot (X \cdot m - W \cdot n) + \sqrt{(Y^2 \cdot p^2 + Z^2 \cdot o^2) \cdot (W \cdot n - X \cdot m)^2 + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (3 \cdot W^2 \cdot n^2 - 2 \cdot W \cdot X \cdot m \cdot n + X^2 \cdot m^2)}}{2 \cdot W \cdot Y \cdot n \cdot p} = 0$$

B

$$\frac{\sqrt{(N_3^2+N_4^2)\cdot(N_1-N_2)^2+2\cdot N_3\cdot N_4\cdot((3\cdot N_1^2-2\cdot N_1\cdot N_2)+N_2^2)}-(N_3+N_4)\cdot(N_1-N_2)}{2\cdot N_1\cdot N_3}-R = 0.00000$$

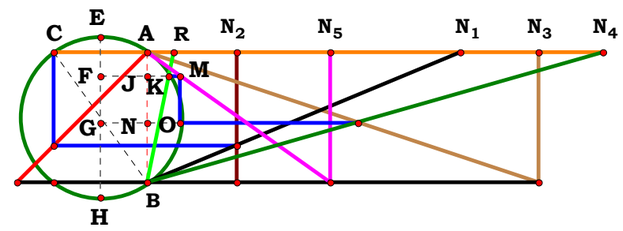
4RST3AB1R9

Unit.

$AB := 1$

Given.

$N_1 := 2.39948$ $N_2 := .68510$ $N_3 := 3.00473$ $N_4 := 3.49634$ $N_5 := 1.40444$



$N_1 = 2.39948$
$N_2 = 0.68510$
$N_3 = 3.00473$
$N_4 = 3.49634$
$N_5 = 1.40444$
$R = 0.20645$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

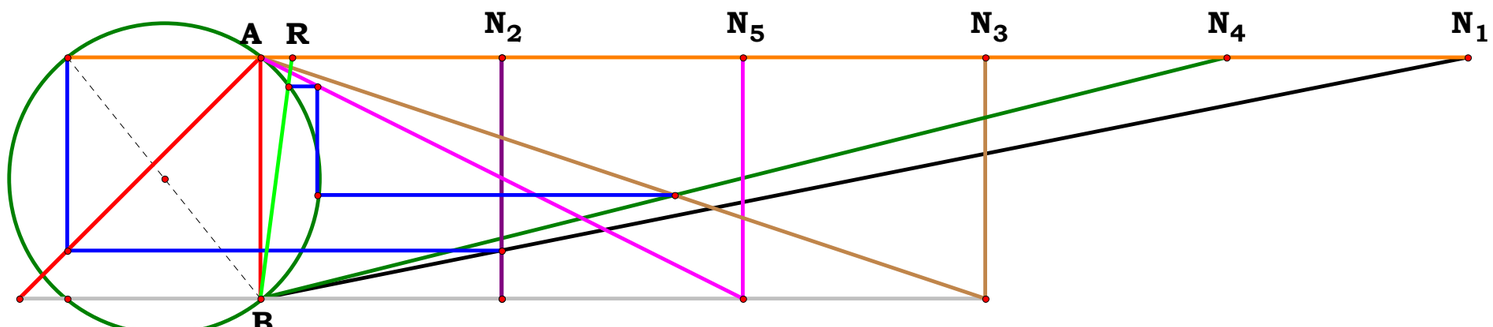
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.206449$$



$N_1 = 5.00000$ $AB = 1.00000$ $NO = 0.23632$ $JK \cdot AB = 0.11400$

$N_2 = 1.00000$ $AC = 0.80000$ $BK = 0.88184$ $R - \frac{JK \cdot AB}{BK} = 0.00000$

$N_3 = 3.00000$ $EH = 1.28062$ $FH = 1.02215$

$N_4 = 4.00000$ $BN = 0.42857$ $FK = 0.51400$

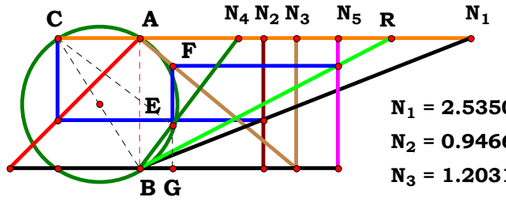
$N_5 = 2.00000$ $GH = 0.56888$ $JK = 0.11400$

$R = 0.12928$ $GO = 0.63632$

Definitions.

$$R - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot (AC + N_5) + 4 \cdot N_3^2 \ \ldots \right.} \right.}{\left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[AC^2 \cdot (N_5^2 - 2) - 2 \cdot AC \cdot N_5 \right] - 4 \cdot N_3 \right] \right] - AC \cdot \sqrt{N_5^2 \cdot (N_3 + N_4)^3} \Bigg]}{\sqrt{N_5^2 \cdot (N_3 + N_4)^3} \cdot \left[AC \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]} = 0$$

4RST3AB1R10



$N_1 = 2.53508$ $N_4 = 0.75526$
$N_2 = 0.94661$ $N_5 = 1.52067$
$N_3 = 1.20317$ $R = 1.92625$

Unit. $AB := 1$ Given. $N_1 := 2.53508$ $N_2 := .94661$ $N_3 := 1.20317$

$N_4 := .75526$ $N_5 := 1.52067$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BG := N_4 \cdot \frac{(BN_4 - EN_4)}{BN_4}$

$FG := AB \cdot \frac{(N_3 - BG)}{N_3}$ $R := \frac{N_5 \cdot AB}{FG}$ $R = 1.926251$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2} = 0$$

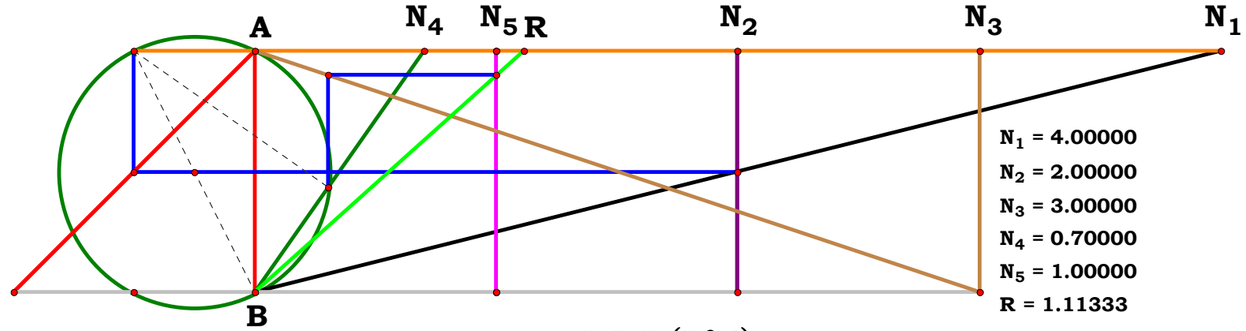
$$R - \frac{N_1 \cdot N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_4^2 \cdot (N_1 - N_2 + N_1 \cdot N_3) - N_1 \cdot N_4 + N_1 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (D^2 + N_u^2)}{E \cdot [B \cdot (D^2 - C \cdot D + N_u^2) - C \cdot N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

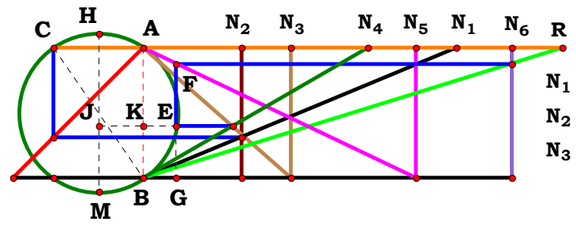
$$R - \frac{V \cdot X \cdot Z \cdot m \cdot (Y^2 + o^2)}{p \cdot [Y^2 \cdot n \cdot (V \cdot m - W \cdot l) + V \cdot X \cdot m \cdot (Y^2 + o^2) - V \cdot Y \cdot m \cdot n \cdot o]} = 0$$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 0.70000$
$N_5 = 1.00000$
$R = 1.11333$

$$\frac{N_1 \cdot N_3 \cdot N_5 \cdot (N_4^2 + 1)}{(N_4^2 \cdot ((N_1 - N_2) + N_1 \cdot N_3) - N_1 \cdot N_4) + N_1 \cdot N_3} - R = 0.00000$$

4RST3AB1R11



$N_1 = 2.39948$ $N_4 = 1.72384$
$N_2 = 0.75290$ $N_5 = 2.09213$
$N_3 = 1.13537$ $N_6 = 2.82825$
$R = 3.21994$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .75290$ $N_3 := 1.13537$

$N_4 := 1.72384$ $N_5 := 2.09213$ $N_6 := 2.82825$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

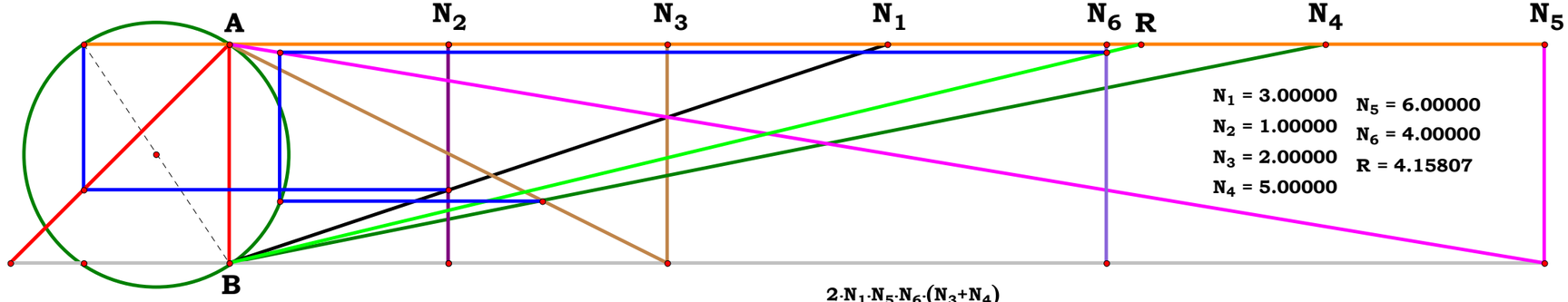
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EG := \frac{N_3 \cdot AB}{N_3 + N_4}$ $HM := \sqrt{AB^2 + AC^2}$

$JM := EG + \frac{HM - AB}{2}$ $JE := \sqrt{JM \cdot (HM - JM)}$

$BG := JE - \frac{AC}{2}$ $FG := \frac{AB \cdot (N_5 - BG)}{N_5}$

$R := \frac{N_6 \cdot AB}{FG}$ $R = 3.219938$



$N_1 = 3.00000$ $N_5 = 6.00000$
$N_2 = 1.00000$ $N_6 = 4.00000$
$N_3 = 2.00000$ $R = 4.15807$
$N_4 = 5.00000$

Definitions.

$$\frac{2 \cdot N_1 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{((N_3 + N_4) \cdot (N_1 - N_2) + 2 \cdot N_1 \cdot N_5 \cdot (N_3 + N_4)) - \sqrt{(N_3^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot ((3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2) + N_2^2)}} - R = 0.00000$$

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{2 \cdot N_1 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot (N_1 - N_2) + 2 \cdot N_1 \cdot N_5 \cdot (N_3 + N_4) - \sqrt{(N_3^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2)}} = 0$$

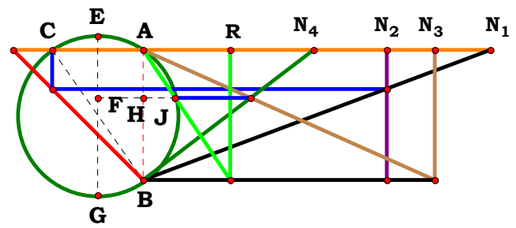
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot B \cdot N_u^2 \cdot (C + D)}{F \cdot \left[(C + D) \cdot \left[E \cdot (B - A) + 2 \cdot B \cdot N_u\right] - E \cdot \sqrt{(C^2 + D^2) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot (A^2 - 2 \cdot A \cdot B + 3 \cdot B^2)}\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot U \cdot Y \cdot Z \cdot l \cdot (W \cdot n + X \cdot m)}{p \cdot \left[(W \cdot n + X \cdot m) \cdot (2 \cdot U \cdot Y \cdot l + U \cdot l \cdot o - V \cdot k \cdot o) - o \cdot \sqrt{(W^2 \cdot n^2 + X^2 \cdot m^2) \cdot (U \cdot l - V \cdot k)^2 + 2 \cdot W \cdot X \cdot m \cdot n \cdot (3 \cdot U^2 \cdot l^2 - 2 \cdot U \cdot V \cdot k \cdot l + V^2 \cdot k^2)}\right]} = 0$$

4RST3AB2R1



$N_1 = 2.66100$
$N_2 = 1.86676$
$N_3 = 2.23955$
$N_4 = 1.30735$
$R = 0.66659$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.86676$ $N_3 := 2.23955$ $N_4 := 1.30735$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

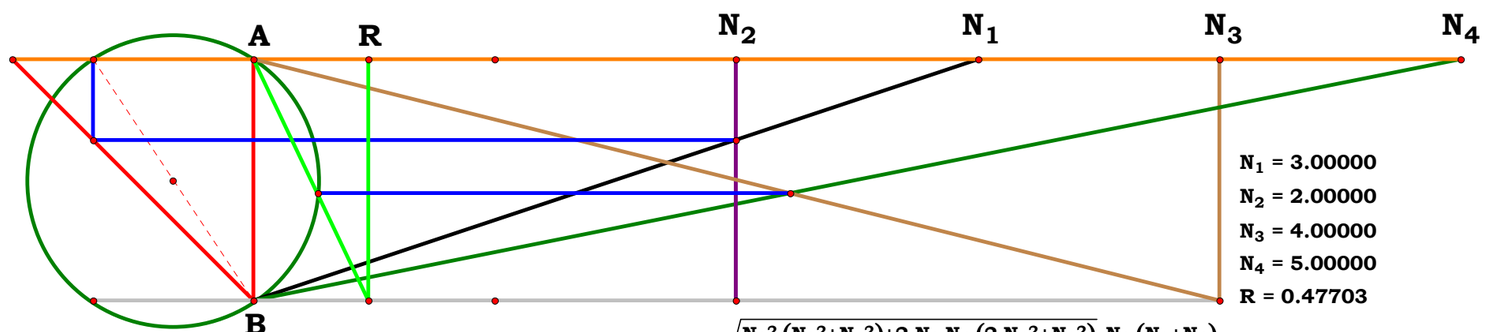
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $AH := \frac{AB \cdot N_4}{N_4 + N_3}$ $EG := \sqrt{AB^2 + AC^2}$

$EF := AH + \frac{(EG - AB)}{2}$ $FJ := \sqrt{EF \cdot (EG - EF)}$

$HJ := FJ - \frac{AC}{2}$ $R := \frac{HJ \cdot AB}{AH}$ $R = 0.666591$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.47703$

$\frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot N_4} = 0$$

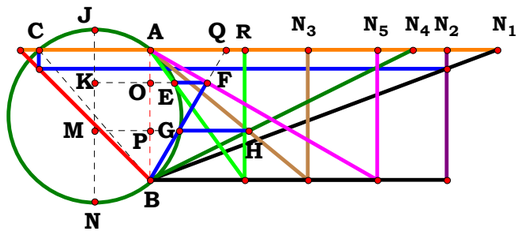
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (A^2 + 2 \cdot B^2)} - A \cdot (C + D)}{2 \cdot B \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (2 \cdot W^2 \cdot n^2 + X^2 \cdot m^2)} - X \cdot m \cdot (Y \cdot p + Z \cdot o)}{2 \cdot W \cdot Z \cdot n \cdot o} = 0$$

4RST3AB2R3



$N_1 = 2.66100$
$N_2 = 2.27357$
$N_3 = 1.21286$
$N_4 = 2.01441$
$N_5 = 1.74751$
R = 0.72462

Given. $AB := 1$ Unit. $N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := 1.212839$
$N_4 := 2.01441$ $N_5 := 1.74751$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

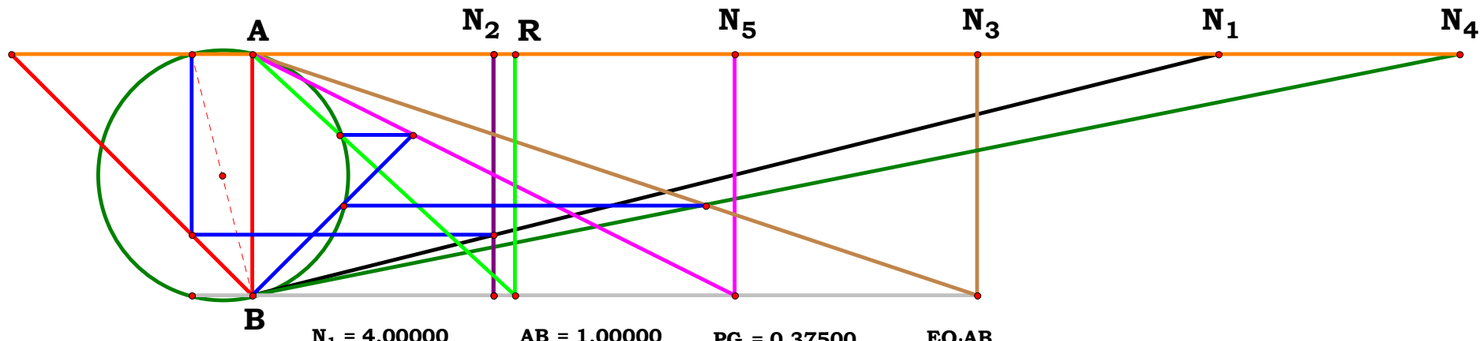
$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad R := \frac{EO \cdot AB}{AO}$$

$R = 0.855795$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
R = 1.08809

AB = 1.00000
AC = 0.25000
BP = 0.37500
JN = 1.03078
JM = 0.64039
GM = 0.50000

PG = 0.37500
AQ = 1.00000
AO = 0.33333
JK = 0.34872
EK = 0.48770
EO = 0.36270

$R - \frac{EO \cdot AB}{AO} = 0.00000$

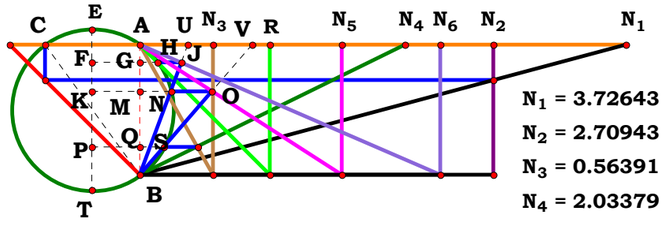
Definitions.

$$AC - \frac{N_2}{N_1} = 0 \qquad BP - \frac{N_3}{N_3 + N_4} = 0 \qquad JN - \frac{\sqrt{N_1^2 + N_2^2}}{N_1} = 0 \qquad JM - \frac{N_1 \cdot (N_4 - N_3) + \sqrt{N_1^2 + N_2^2} \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0 \qquad GM - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_4 \cdot N_3 \cdot (2 \cdot N_1^2 + N_2^2)}}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$PG - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_4 \cdot N_3 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0 \qquad AQ - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_4 \cdot N_3 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot N_3} = 0$$

$$AO - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot N_3 - N_2 \cdot N_4 + 2 \cdot N_1 \cdot N_3 \cdot N_5} = 0 \qquad \text{Etc.}$$

4RST3AB2R4



$N_1 = 3.72643$
$N_2 = 2.70943$
$N_3 = 0.56391$
$N_4 = 2.03379$
$N_5 = 1.55380$
$N_6 = 2.30522$
$R = 0.99720$

Unit. $AB := 1$ **Given.** $N_1 := 3.72643$ $N_2 := 2.70943$ $N_3 := .56391$ $N_4 := 2.03379$ $N_5 := 1.55380$ $N_6 := 2.30522$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2} \qquad KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2} \qquad AU := \frac{MN \cdot AB}{BM}$$

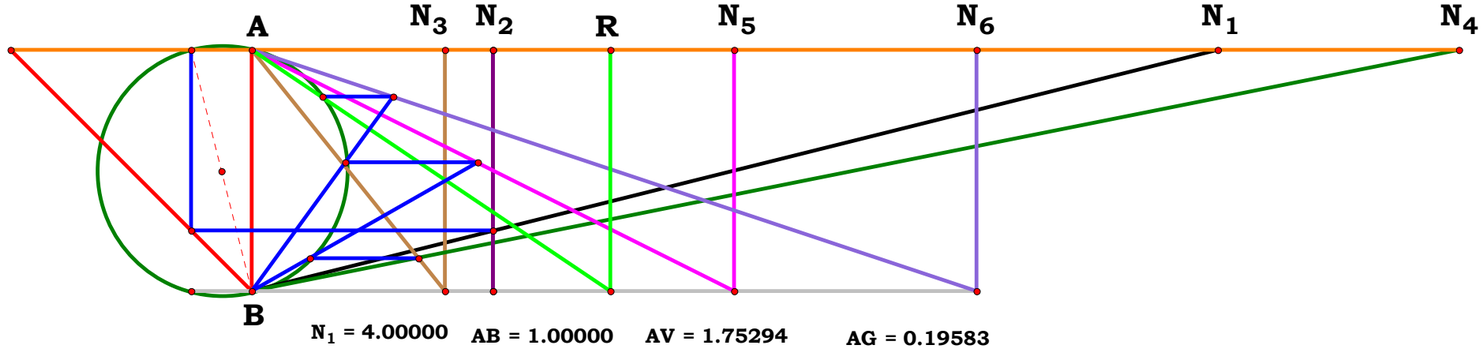
$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 0.997203$

Definitions.



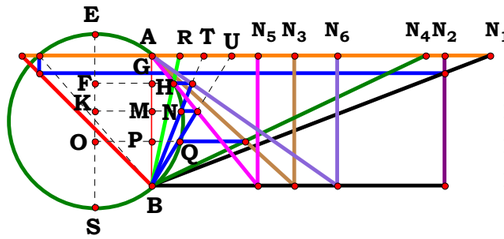
$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 0.80000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$N_6 = 3.00000$
$R = 1.48627$

$AB = 1.00000$
$AC = 0.25000$
$BQ = 0.13793$
$ET = 1.03078$
$EP = 0.87746$
$PS = 0.36678$
$QS = 0.24178$

$AV = 1.75294$
$BM = 0.53292$
$KT = 0.54830$
$KN = 0.51434$
$MN = 0.38934$
$AU = 0.73058$
$BG = 0.80417$

$AG = 0.19583$
$EF = 0.21122$
$FH = 0.41606$
$GH = 0.29106$
$R - \frac{GH \cdot AB}{AG} = 0.00000$

4RST3AB2R5



$N_1 = 2.59320$ $N_5 = 0.81768$
$N_2 = 2.24451$ $N_6 = 1.42381$
$N_3 = 1.09663$ $R = 0.20977$
$N_4 = 2.10159$

Unit. $AB := 1$ **Given.** $N_1 := 2.59320$ $N_2 := 2.24451$ $N_3 := 1.09663$ $N_4 := 2.10159$ $N_5 := .81768$ $N_6 := 1.42381$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP} \qquad BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2} \qquad KN := \sqrt{KS \cdot (ES - KS)}$$

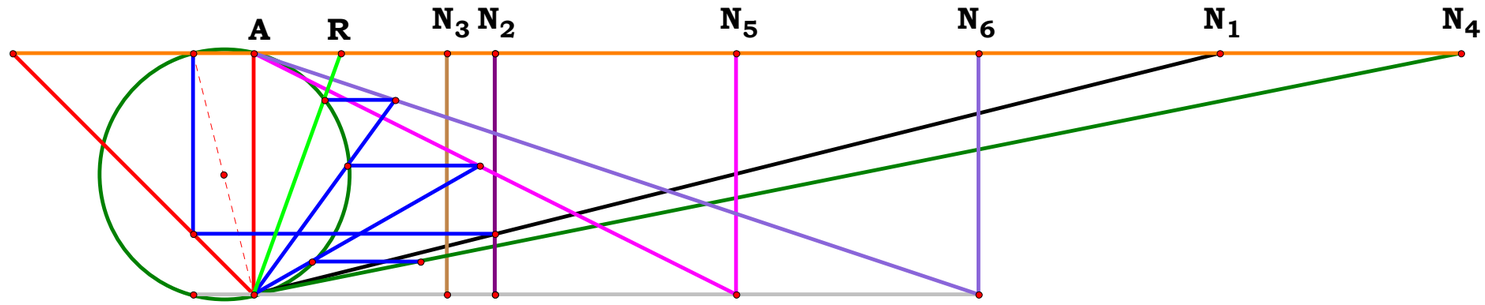
$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

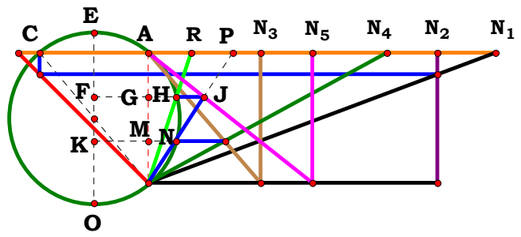
$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.209765$$

Definitions.



$N_1 = 4.00000$ $AB = 1.00000$ $AU = 1.75294$ $FS = 0.81955$
$N_2 = 1.00000$ $AC = 0.25000$ $BM = 0.53292$ $FH = 0.41606$
$N_3 = 0.80000$ $BP = 0.13793$ $KS = 0.54830$ $GH = 0.29106$
$N_4 = 5.00000$ $ES = 1.03078$ $KN = 0.51434$ $R - \frac{GH \cdot AB}{BG} = 0.00000$
$N_5 = 2.00000$ $OS = 0.15332$ $MN = 0.38934$
$N_6 = 3.00000$ $OQ = 0.36678$ $AT = 0.73058$
$R = 0.36194$ $PQ = 0.24178$ $BG = 0.80417$

4RST3AB2R6



N_1 = 2.66100
N_2 = 2.21545
N_3 = 0.86417
N_4 = 1.83038
N_5 = 1.26322
R = 0.32517

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 2.21545$ $N_3 := .86417$ $N_4 := 1.83038$ $N_5 := 1.26322$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

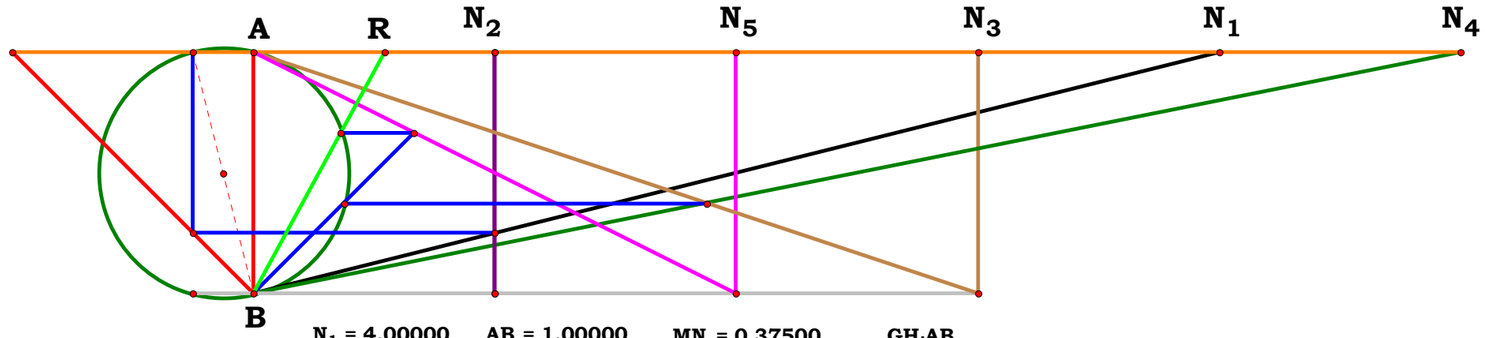
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.325173$



N_1 = 4.00000
N_2 = 1.00000
N_3 = 3.00000
N_4 = 5.00000
N_5 = 2.00000
R = 0.54404

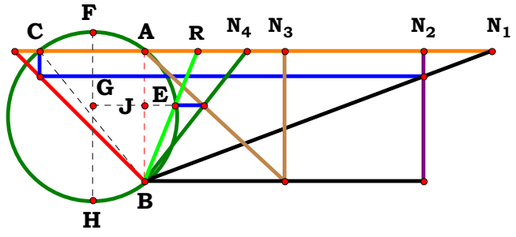
AB = 1.00000
AC = 0.25000
BM = 0.37500
EO = 1.03078
KO = 0.39039
KN = 0.50000

MN = 0.37500
AP = 1.00000
BG = 0.66667
FO = 0.68205
FH = 0.48770
GH = 0.36270

$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

4RST3AB2R8



$N_1 = 2.66100$
$N_2 = 2.13797$
$N_3 = 1.07726$
$N_4 = 0.78432$
$R = 0.40579$

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 2.13797$ $N_3 := 1.07726$ $N_4 := .78432$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

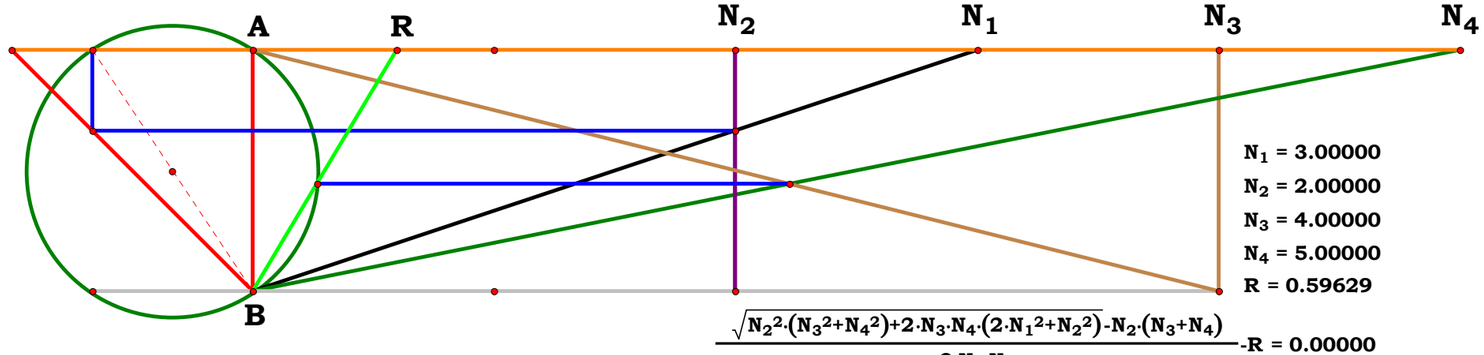
Descriptions.

$AC := \frac{N_2}{N_1}$ $BJ := \frac{AB \cdot N_3}{N_3 + N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $GH := BJ + \frac{FH - AB}{2}$

$GE := \sqrt{GH \cdot (FH - GH)}$ $JE := GE - \frac{AC}{2}$

$R := \frac{JE \cdot AB}{BJ}$ $R = 0.40579$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.59629$

$\frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot N_3} = 0$$

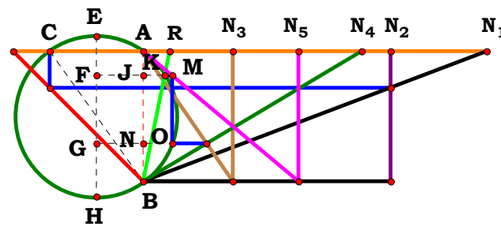
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (A^2 + 2 \cdot B^2)} - A \cdot (C + D)}{2 \cdot B \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (2 \cdot W^2 \cdot n^2 + X^2 \cdot m^2)} - X \cdot m \cdot (Y \cdot p + Z \cdot o)}{2 \cdot W \cdot Y \cdot n \cdot p} = 0$$

4RST3AB2R9



$N_1 = 2.63194$
$N_2 = 1.89582$
$N_3 = 0.68983$
$N_4 = 1.67541$
$N_5 = 1.19542$
$R = 0.20677$

Unit. $AB := 1$ Given. $N_1 := 2.63194$ $N_2 := 1.89582$ $N_3 := .68983$ $N_4 := 1.67541$ $N_5 := 1.19542$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

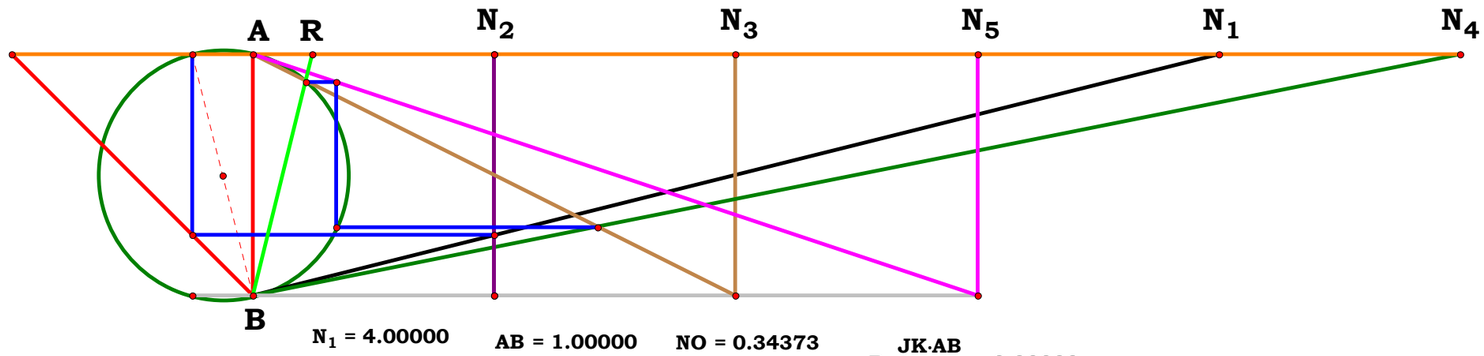
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.206773$$



$N_1 = 4.00000$ $AB = 1.00000$ $NO = 0.34373$ $R - \frac{JK \cdot AB}{BK} = 0.00000$
$N_2 = 1.00000$ $AC = 0.25000$ $BK = 0.88542$
$N_3 = 2.00000$ $EH = 1.03078$ $FH = 0.90081$
$N_4 = 5.00000$ $BN = 0.28571$ $FK = 0.34216$
$N_5 = 3.00000$ $GH = 0.30110$ $JK = 0.21716$
$R = 0.24526$ $GO = 0.46873$

Definitions.

$$AC - \frac{N_2}{N_1} = 0 \qquad EH - \frac{\sqrt{N_1^2 + N_2^2}}{N_1} = 0 \qquad BN - \frac{N_3}{N_3 + N_4} = 0$$

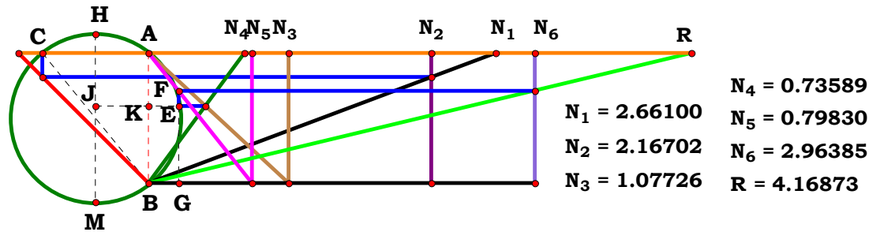
$$GH - \left[\frac{(N_3 + N_4) \cdot \sqrt{N_1^2 + N_2^2} + N_1 \cdot (N_3 - N_4)}{2 \cdot N_1 \cdot (N_3 + N_4)} \right] = 0 \qquad GO - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_4 \cdot N_3 \cdot (2 \cdot N_1^2 + N_2^2)}}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$NO - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_4 \cdot N_3 \cdot (2 \cdot N_1^2 + N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$BK - \frac{(N_3 + N_4) \cdot (N_2 + 2 \cdot N_1 \cdot N_5) - \sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)}}{2 \cdot N_5 \cdot N_1 \cdot (N_3 + N_4)} = 0$$

$$FH - \frac{(N_3 \cdot N_5 + N_4 \cdot N_5) \cdot \sqrt{N_1^2 + N_2^2} + (N_3 + N_4) \cdot (N_2 + N_1 \cdot N_5) - \sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2)}}{2 \cdot N_1 \cdot N_5 \cdot (N_3 + N_4)} = 0 \qquad \text{Etc.}$$

4RST3AB2R11



$N_4 = 0.73589$
$N_5 = 0.79830$
$N_6 = 2.96385$
$R = 4.16873$

$N_1 = 2.66100$
$N_2 = 2.16702$
$N_3 = 1.07726$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 2.16702$ $N_3 := 1.07726$

$N_4 := .73589$ $N_5 := .79830$ $N_6 := 2.96385$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

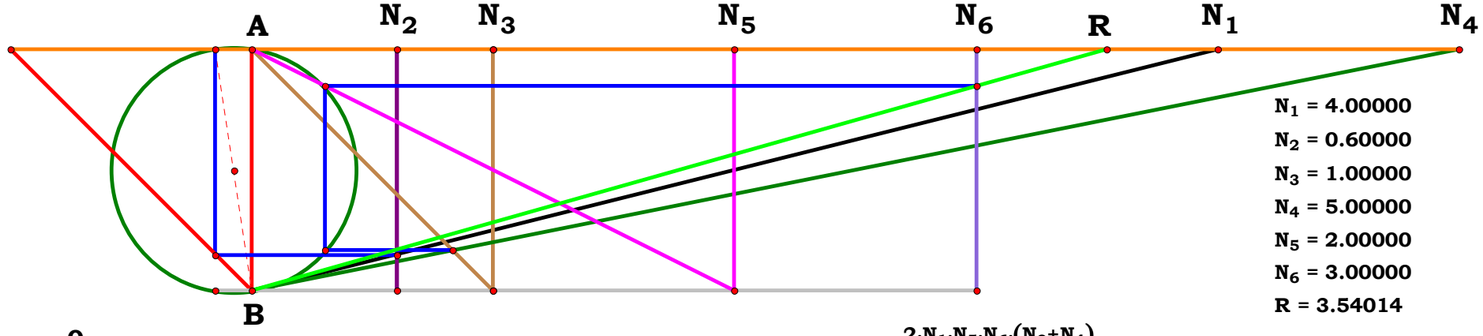
Descriptions.

$AC := \frac{N_2}{N_1}$ $EG := \frac{N_3 \cdot AB}{N_3 + N_4}$

$HM := \sqrt{AB^2 + AC^2}$ $JM := EG + \frac{HM - AB}{2}$

$JE := \sqrt{JM \cdot (HM - JM)}$ $BG := JE - \frac{AC}{2}$

$FG := \frac{AB \cdot (N_5 - BG)}{N_5}$ $R := \frac{N_6 \cdot AB}{FG}$ $R = 4.168744$



$N_1 = 4.00000$
$N_2 = 0.60000$
$N_3 = 1.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$N_6 = 3.00000$
$R = 3.54014$

$\frac{2 \cdot N_1 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3+N_4) \cdot (N_2+2 \cdot N_1 \cdot N_5) - \sqrt{N_2^2 \cdot (N_3+N_4)^2 + 4 \cdot N_1^2 \cdot N_3 \cdot N_4}} - R = 0.00000$

Definitions.

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{2 \cdot N_1 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot (N_2 + 2 \cdot N_1 \cdot N_5) - \sqrt{N_2^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_1^2 \cdot N_3 \cdot N_4}} = 0$$

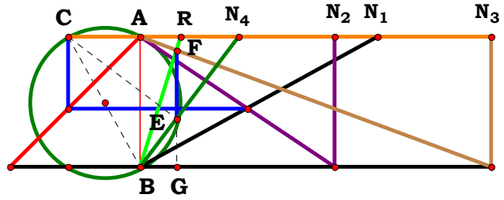
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot B \cdot N_u^2 \cdot (C + D)}{F \cdot \left[(C + D) \cdot (A \cdot E + 2 \cdot B \cdot N_u) - E \cdot \sqrt{A^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (A^2 + 2 \cdot B^2)} \right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot U \cdot Y \cdot Z \cdot l \cdot (W \cdot n + X \cdot m)}{p \cdot \left[(W \cdot n + X \cdot m) \cdot (2 \cdot U \cdot Y \cdot l + V \cdot k \cdot o) - o \cdot \sqrt{4 \cdot U^2 \cdot W \cdot X \cdot l^2 \cdot m \cdot n + V^2 \cdot W^2 \cdot k^2 \cdot n^2 + 2 \cdot V^2 \cdot W \cdot X \cdot k^2 \cdot m \cdot n + V^2 \cdot X^2 \cdot k^2 \cdot m^2} \right]} = 0$$

4RST3AB3R0



$N_1 = 1.81833$
$N_2 = 1.48902$
$N_3 = 2.69478$
$N_4 = 0.75526$
$R = 0.31400$

Unit. $AB := 1$ Given. $N_1 := 1.81833$ $N_2 := 1.48902$ $N_3 := 2.69478$ $N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_4 := N_4 + AC \qquad BN_4 := \sqrt{N_4^2 + AB^2}$$

$$EN_4 := \frac{N_4 \cdot CN_4}{BN_4} \qquad BE := BN_4 - EN_4 \qquad BG := \frac{N_4 \cdot BE}{BN_4}$$

$$FG := \frac{AB \cdot (N_3 - BG)}{N_3} \qquad R := \frac{BG \cdot AB}{FG} \qquad R = 0.314003$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC \cdot N_4 - 1)}{N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2} = 0$$

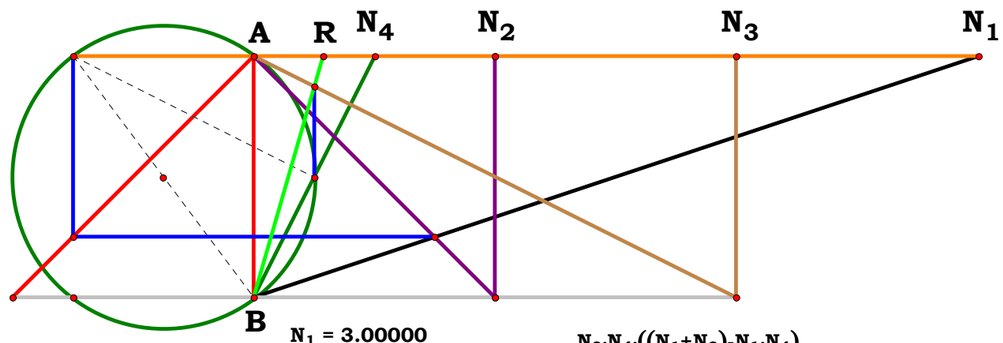
$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2 - N_1 \cdot N_4)}{N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3) + (N_3 - N_4) \cdot (N_1 + N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot [D \cdot (A + B) - B \cdot N_u]}{D^2 \cdot (A + B) + N_u^2 \cdot (A + B) - C \cdot D \cdot (A + B) + B \cdot C \cdot N_u} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

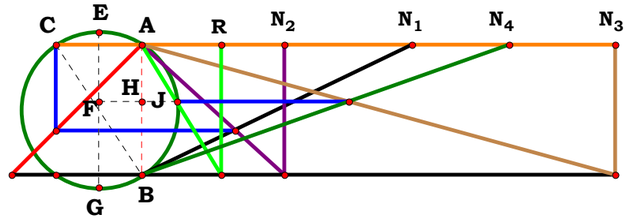
$$R - \frac{Y \cdot Z \cdot (W \cdot n \cdot p - W \cdot Z \cdot n + X \cdot m \cdot p)}{Y \cdot (Z^2 + p^2) \cdot (W \cdot n + X \cdot m) + Z \cdot o \cdot (W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p)} = 0$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 0.50000$
$R = 0.28571$

$$\frac{N_3 \cdot N_4 \cdot ((N_1 + N_2) - N_1 \cdot N_4)}{N_4^2 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3) + (N_3 - N_4) \cdot (N_1 + N_2)} - R = 0.00000$$

4RST3AB3R1



$N_1 = 2.07016$
$N_2 = 1.09190$
$N_3 = 3.63430$
$N_4 = 2.81833$
$R = 0.61113$

Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := 1.09190$ $N_3 := 3.63430$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

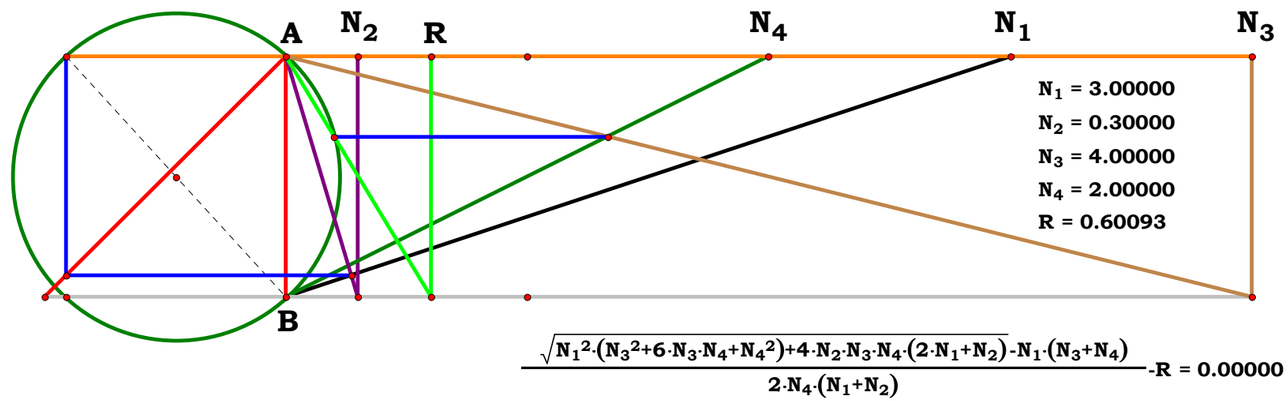
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $AH := \frac{AB \cdot N_4}{N_4 + N_3}$

$EG := \sqrt{AB^2 + AC^2}$ $EF := AH + \frac{(EG - AB)}{2}$

$FJ := \sqrt{EF \cdot (EG - EF)}$ $HJ := FJ - \frac{AC}{2}$

$R := \frac{HJ \cdot AB}{AH}$ $R = 0.611133$



$N_1 = 3.00000$
$N_2 = 0.30000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 0.60093$

$\frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1 + N_2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

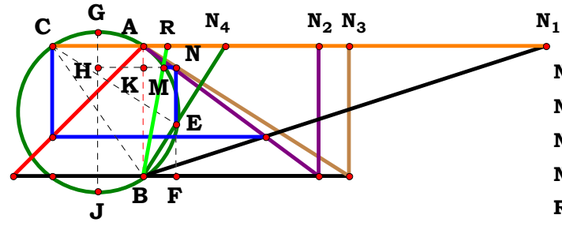
$$R - -\frac{N_1 \cdot N_3 - \sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1 + N_2)} + N_1 \cdot N_4}{2 \cdot (N_1 + N_2) \cdot N_4} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + 3 \cdot B^2)} - B \cdot (C + D)}{2 \cdot C \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (3 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 2 \cdot X^2 \cdot m^2)} - W \cdot n \cdot (Y \cdot p + Z \cdot o)}{2 \cdot (W \cdot n + X \cdot m) \cdot Z \cdot o} = 0$$



$N_1 = 3.08717$
$N_2 = 1.34373$
$N_3 = 1.58092$
$N_4 = 0.62935$
$R = 0.18745$

Unit. $AB := 1$ Given. $N_1 := 3.08717$ $N_2 := 1.34373$ $N_3 := 1.58092$ $N_4 := .62935$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

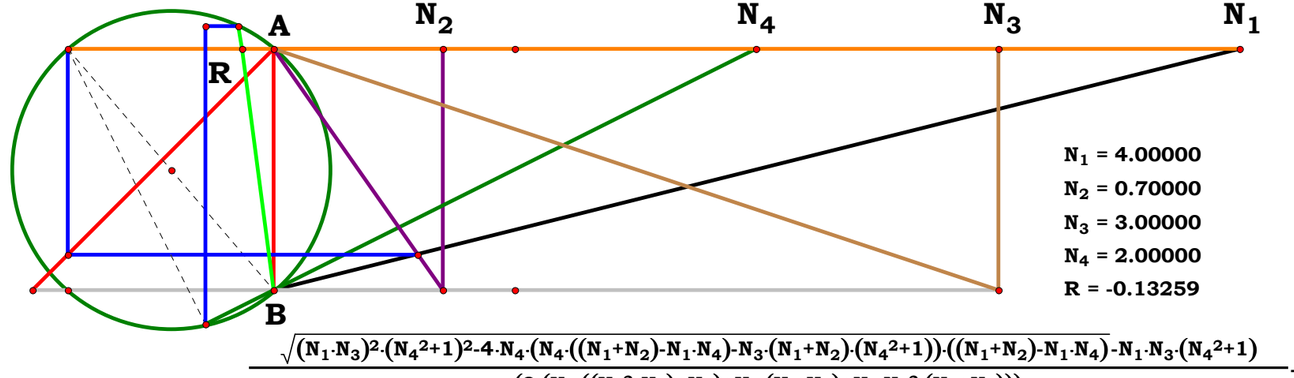
$AC := \frac{N_1}{N_1 + N_2}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BF := \frac{N_4 \cdot (BN_4 - EN_4)}{BN_4}$ $AK := \frac{AB \cdot BF}{N_3}$

$GJ := \sqrt{AB^2 + AC^2}$ $GH := AK + \frac{GJ - AB}{2}$

$HM := \sqrt{GH \cdot (GJ - GH)}$ $KM := HM - \frac{AC}{2}$

$R := \frac{KM \cdot AB}{AB - AK}$ $R = 0.187449$



$N_1 = 4.00000$
$N_2 = 0.70000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = -0.13259$

$$\frac{\sqrt{(N_1 \cdot N_3)^2 \cdot (N_4^2+1)^2 - 4 \cdot N_4 \cdot (N_4 \cdot ((N_1+N_2) - N_1 \cdot N_4) - N_3 \cdot (N_1+N_2) \cdot (N_4^2+1)) \cdot ((N_1+N_2) - N_1 \cdot N_4)} - N_1 \cdot N_3 \cdot (N_4^2+1)}{(2 \cdot (N_1 \cdot ((N_4^2 - N_4) + N_3) + N_2 \cdot (N_3 - N_4) + N_3 \cdot N_4^2 \cdot (N_1+N_2)))} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_4^2+1) \cdot \left[AC \cdot N_3 \cdot (N_4^2+1) - \sqrt{AC \cdot N_3 \cdot N_4^2 \cdot (2 \cdot AC \cdot N_3 - 4 \cdot N_4^2 + AC \cdot N_3 \cdot N_4^2 - 4) + AC^2 \cdot N_3^2 - 4 \cdot AC \cdot N_4^3 \cdot (AC \cdot N_4 - 2) + 4 \cdot N_3 \cdot N_4 \cdot (N_4^2+1) - 4 \cdot N_4^2}\right]}{2 \cdot \sqrt{[N_3 \cdot (N_4^2+1)]^2} \cdot (N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2)} = 0$$

$$R - \frac{N_3 \cdot (N_1+N_2) \cdot (N_4^2+1) \cdot \left[\sqrt{N_1^2 \cdot N_3^2 \cdot (N_4^2+1)^2 - 4 \cdot N_4 \cdot [N_4 \cdot (N_1+N_2-N_1 \cdot N_4) - N_3 \cdot (N_1+N_2) \cdot (N_4^2+1)] \cdot (N_1+N_2-N_1 \cdot N_4)} - N_1 \cdot N_3 \cdot (N_4^2+1)\right]}{2 \cdot \sqrt{N_3^2 \cdot (N_1+N_2)^2 \cdot (N_4^2+1)^2} \cdot (N_1 \cdot N_4^2 + N_1 \cdot N_3 - N_1 \cdot N_4 + N_2 \cdot N_3 - N_2 \cdot N_4 + N_1 \cdot N_3 \cdot N_4^2 + N_2 \cdot N_3 \cdot N_4^2)} = 0$$

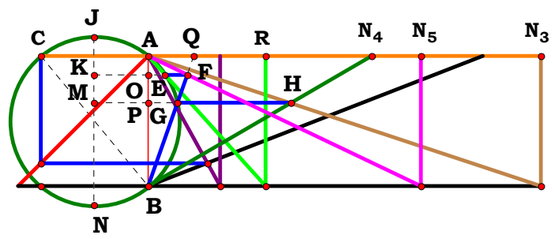
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot (D^2 + N_u^2) - \sqrt{B^2 \cdot (D^2 + N_u^2)^2 + 4 \cdot C \cdot [(A+B) \cdot (D^2 - C \cdot D + N_u^2) + B \cdot C \cdot N_u] \cdot [D \cdot (A+B) - B \cdot N_u]}}{2 \cdot [D \cdot (C-D) \cdot (A+B) - N_u \cdot [B \cdot C + N_u \cdot (A+B)]]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot W^2 \cdot n^2 \cdot (Z^2+p^2)^2 - 4 \cdot Z \cdot o \cdot (W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p) \cdot [Y \cdot (Z^2+p^2) \cdot (W \cdot n + X \cdot m) + Z \cdot o \cdot (W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p)]} - W \cdot Y \cdot n \cdot (Z^2+p^2)}{2 \cdot (W \cdot Y \cdot Z^2 \cdot n + X \cdot Y \cdot Z^2 \cdot m + W \cdot Y \cdot n \cdot p^2 + W \cdot Z^2 \cdot n \cdot o + X \cdot Y \cdot m \cdot p^2 - W \cdot Z \cdot n \cdot o \cdot p - X \cdot Z \cdot m \cdot o \cdot p)} = 0$$

4RST3AB3R3



$N_1 = 2.56414$
$N_2 = 0.54950$
$N_3 = 3.01441$
$N_4 = 1.71415$
$N_5 = 2.09213$
$R = 0.90124$

Unit. $AB := 1$ Given. $N_1 := 3.87172$ $N_2 := 1.45996$ $N_3 := .70920$
$N_4 := 1.75290$ $N_5 := 3.09945$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

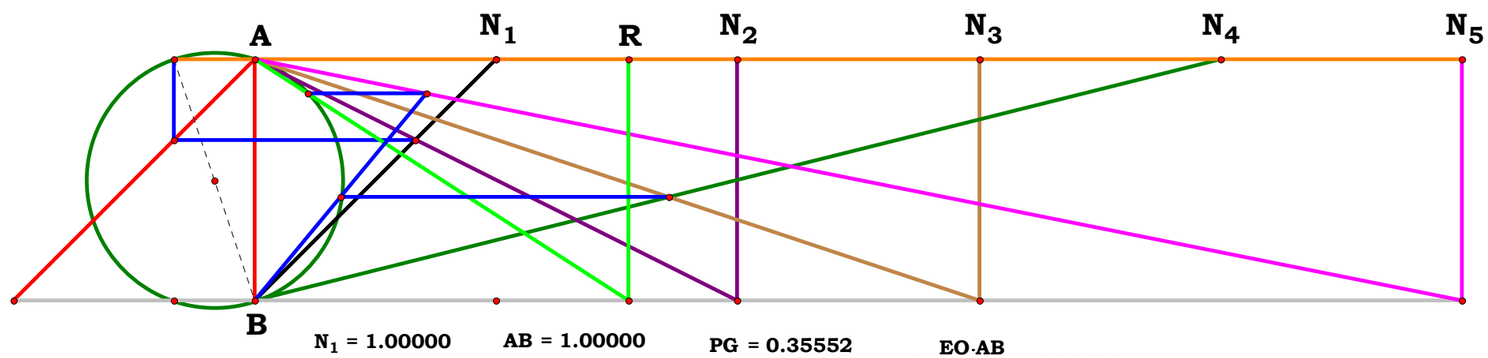
$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad AR := \frac{EO \cdot AB}{AO}$$

$AR = 0.892637$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 1.54891$

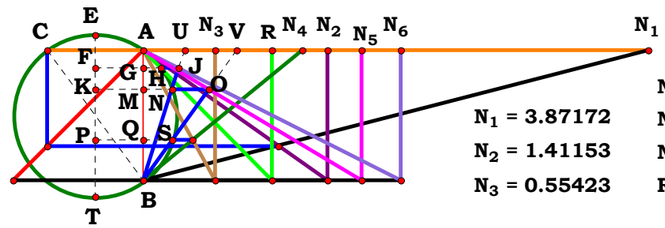
$AB = 1.00000$
$AC = 0.33333$
$BP = 0.42857$
$JN = 1.05409$
$JM = 0.59847$
$GM = 0.52218$

$PG = 0.35552$
$AQ = 0.82954$
$AO = 0.14230$

$R - \frac{EO \cdot AB}{AO} = 0.00000$

$JK = 0.16935$
$EK = 0.38708$
$EO = 0.22041$

4RST3AB3R4



$N_1 = 3.87172$ $N_4 = 1.22018$
$N_2 = 1.41153$ $N_5 = 1.67564$
$N_3 = 0.55423$ $N_6 = 1.97696$
R = 0.99248

Unit. $AB := 1$ **Given.** $N_1 := 3.87172$ $N_2 := 1.41153$ $N_3 := .55423$ $N_4 := 1.22018$ $N_5 := 1.67564$ $N_6 := 1.97696$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ}$$

$$BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

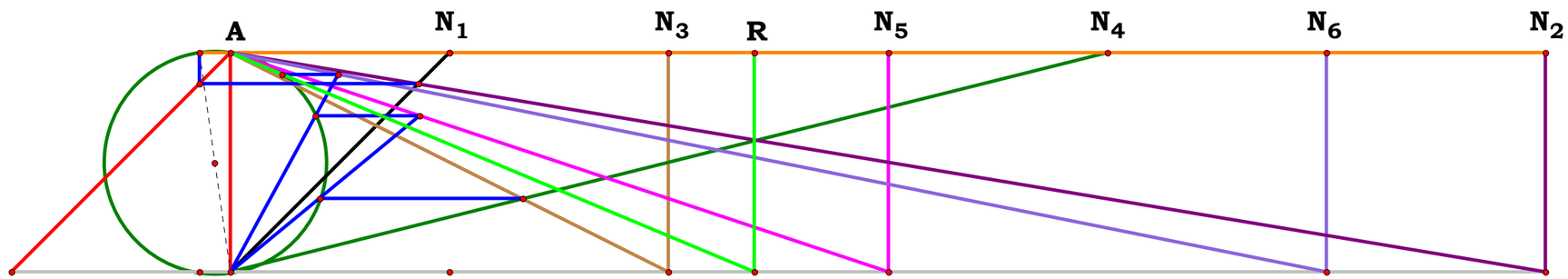
$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{AG}$$

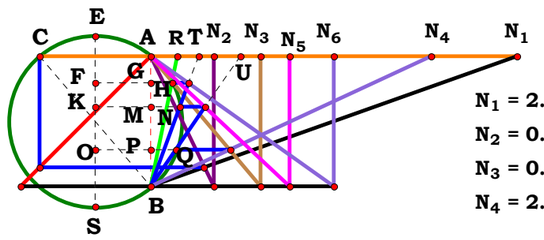
$AR = 0.992484$

Definitions.



$N_1 = 1.00000$ $AB = 1.00000$ $AV = 1.21607$ $AG = 0.09815$
$N_2 = 6.00000$ $AC = 0.14286$ $BM = 0.71156$ $EF = 0.10323$
$N_3 = 2.00000$ $BQ = 0.33333$ $KT = 0.71664$ $FH = 0.30597$
$N_4 = 4.00000$ $ET = 1.01015$ $KN = 0.45863$ $GH = 0.23454$
$N_5 = 3.00000$ $EP = 0.67174$ $MN = 0.38720$ $R - \frac{GH \cdot AB}{AG} = 0.00000$
$N_6 = 5.00000$ $PS = 0.47679$ $AU = 0.54416$
$R = 2.38964$ $QS = 0.40536$ $BG = 0.90185$

4RST3AB3R5



N_1 = 2.80628
N_2 = 0.48170
N_3 = 0.84480
N_4 = 2.15002
N_5 = 1.06544
N_6 = 1.40550
R = 0.20285

Unit. $AB := 1$ **Given.** $N_1 := 2.80628$ $N_2 := .48170$ $N_3 := .84480$

$N_4 := 2.15002$ $N_5 := 1.06544$ $N_6 := 1.40550$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

$$KN := \sqrt{KS \cdot (ES - KS)}$$

$$MN := KN - \frac{AC}{2}$$

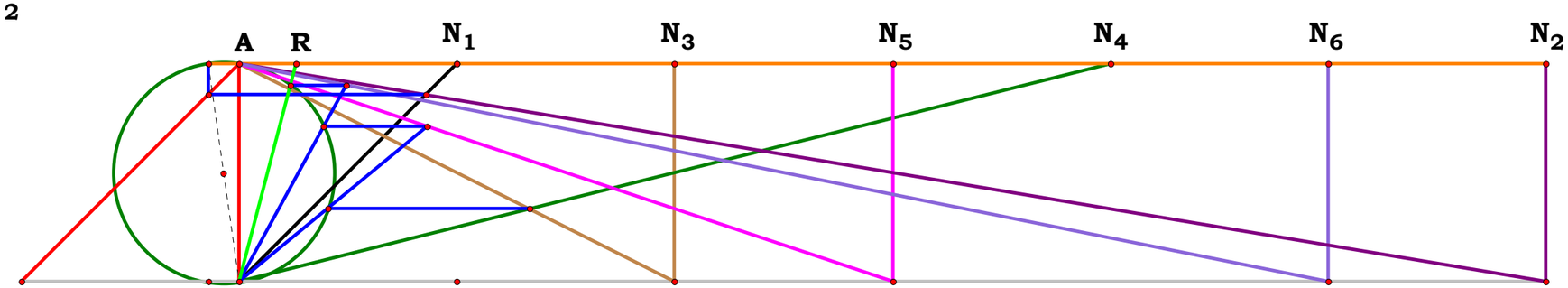
$$AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$AR := \frac{GH \cdot AB}{BG} \qquad AR = 0.20285$$

Definitions.



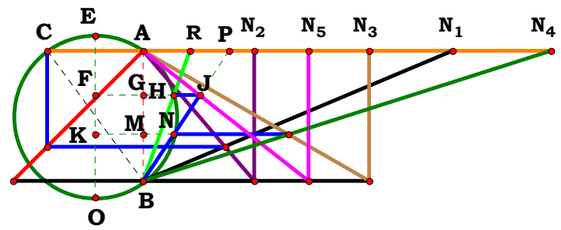
N_1 = 1.00000
N_2 = 6.00000
N_3 = 2.00000
N_4 = 4.00000
N_5 = 3.00000
N_6 = 5.00000
R = 0.26007

AB = 1.00000
AC = 0.14286
BP = 0.33333
ES = 1.01015
OS = 0.33841
OQ = 0.47679
PQ = 0.40536

AU = 1.21607
BM = 0.71156
KS = 0.71664
KN = 0.45863
MN = 0.38720
AT = 0.54416
BG = 0.90185

FS = 0.90693
FH = 0.30597
GH = 0.23454
R-$\frac{GH \cdot AB}{BG}$ = 0.00000

4RST3AB3R6



$N_1 = 2.37042$
$N_2 = 0.84976$
$N_3 = 1.73589$
$N_4 = 3.12828$
$N_5 = 1.26884$
$R = 0.35378$

Unit. $AB := 1$ Given. $N_1 := 2.37042$ $N_2 := .84976$ $N_3 := 1.73598$ $N_4 := 3.12828$ $N_5 := 1.26884$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

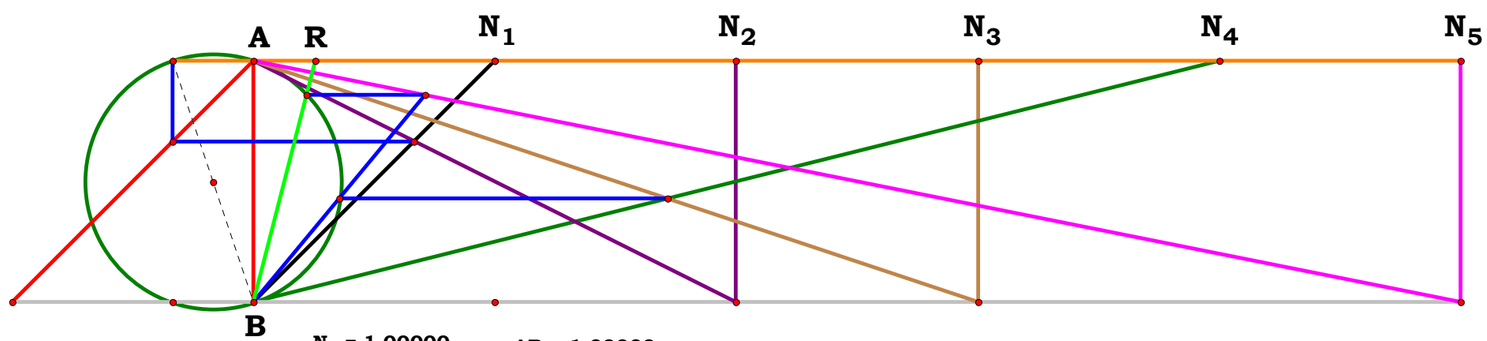
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{BG}$$

$AR = 0.353777$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 0.25698$

$AB = 1.00000$
$AC = 0.33333$
$BM = 0.42857$
$EO = 1.05409$
$KO = 0.45562$
$KN = 0.52218$

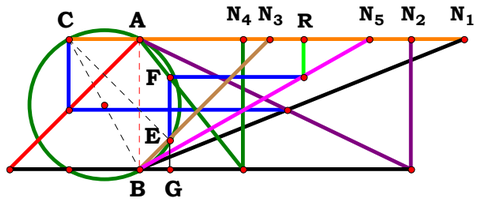
$MN = 0.35552$
$AP = 0.82954$
$BG = 0.85770$
$FO = 0.88475$
$FH = 0.38708$
$GH = 0.22041$

$GH \cdot AB$

$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

4RST3AB3R7



$N_1 = 2.48665$
$N_2 = 2.07985$
$N_3 = 0.99977$
$N_4 = 0.79401$
$N_5 = 1.76281$
$R = 1.25708$

Unit. $AB := 1$ Given. $N_1 := 2.48665$ $N_2 := 2.07985$ $N_3 := .99977$

$N_4 := .79401$ $N_5 := 1.76281$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

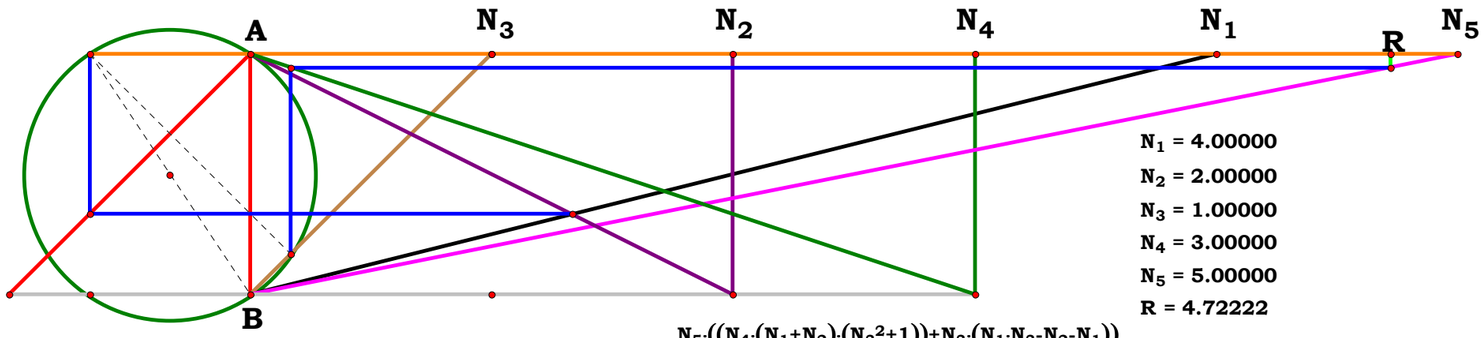
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3} \qquad FG := \frac{AB \cdot (N_4 - BG)}{N_4}$$

$$R := \frac{N_5 \cdot FG}{AB} \qquad R = 1.257081$$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$N_5 = 5.00000$
$R = 4.72222$

$$\frac{N_5 \cdot ((N_4 \cdot (N_1 + N_2)) \cdot (N_3^2 + 1)) + N_3 \cdot (N_1 \cdot N_3 - N_2 - N_1)}{(N_4 \cdot (N_1 + N_2)) \cdot (N_3^2 + 1))} - R = 0.00000$$

Definitions.

$$R - \frac{N_5 \cdot \left(N_4 - N_3 + N_3^2 \cdot N_4 + AC \cdot N_3^2\right)}{N_4 \cdot \left(N_3^2 + 1\right)} = 0$$

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot \left(N_3^2 + 1\right) + N_3 \cdot N_5 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right)}{N_4 \cdot (N_1 + N_2) \cdot \left(N_3^2 + 1\right)} = 0$$

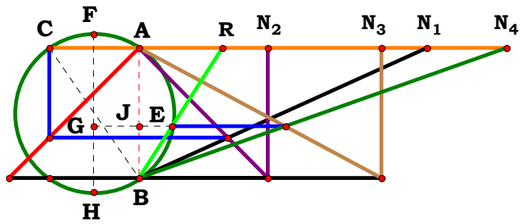
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u^3 \cdot (A + B) + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C - D) \cdot (A + B)}{E \cdot \left(C^2 + N_u^2\right) \cdot (A + B)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot \left(X^2 + n^2\right) \cdot (V \cdot m + W \cdot l) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n)}{Y \cdot p \cdot (V \cdot m + W \cdot l) \cdot \left(X^2 + n^2\right)} = 0$$

4RST3AB3R8



$N_1 = 2.20577$
$N_2 = 0.98536$
$N_3 = 1.86181$
$N_4 = 2.81833$
$R = 0.63739$

Unit. $AB := 1$ Given. $N_1 := 2.20577$ $N_2 := .98536$ $N_3 := 1.86181$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

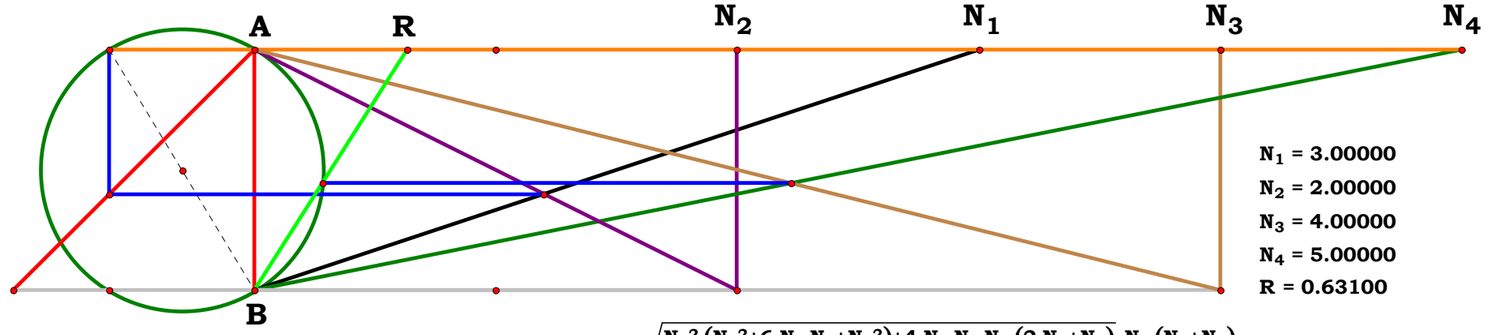
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BJ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$FH := \sqrt{AB^2 + AC^2} \qquad GH := BJ + \frac{FH - AB}{2}$$

$$GE := \sqrt{GH \cdot (FH - GH)} \qquad JE := GE - \frac{AC}{2}$$

$$R := \frac{JE \cdot AB}{BJ} \qquad R = 0.637387$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.63100$

$$\frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1 + N_2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot (N_1 + N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_1^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1 + N_2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot N_3} = 0$$

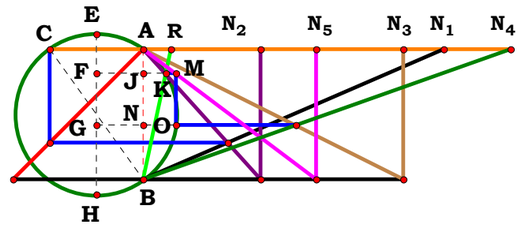
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{B^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + 3 \cdot B^2)} - B \cdot (C + D)}{2 \cdot D \cdot (A + B)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot (Y^2 \cdot p^2 + 6 \cdot Y \cdot Z \cdot o \cdot p + Z^2 \cdot o^2) + 4 \cdot X \cdot Y \cdot Z \cdot m \cdot o \cdot p \cdot (2 \cdot W \cdot n + X \cdot m)} - W \cdot n \cdot (Y \cdot p + Z \cdot o)}{2 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)} = 0$$

4RST3AB3R9



$N_1 = 2.30262$
$N_2 = 0.89818$
$N_3 = 1.99741$
$N_4 = 2.81833$
$N_5 = 1.32695$
$R = 0.21169$

Unit. $AB := 1$ Given. $N_1 := 2.30262$ $N_2 := .89818$ $N_3 := 1.99741$

$N_4 := 2.81833$ $N_5 := 1.32695$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

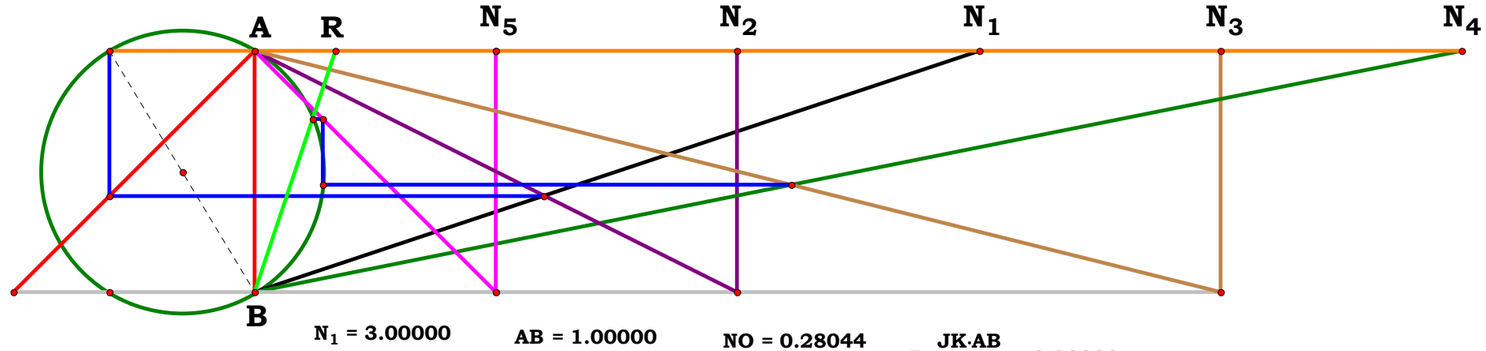
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$AR := \frac{JK \cdot AB}{BK} \qquad AR = 0.211686$$



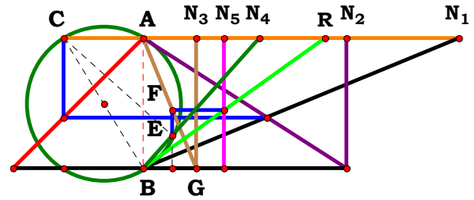
$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
$R = 0.33379$

$AB = 1.00000$
$AC = 0.60000$
$EH = 1.16619$
$BN = 0.44444$
$GH = 0.52754$
$GO = 0.58044$

$NO = 0.28044$
$BK = 0.71956$
$FH = 0.80265$
$FK = 0.54018$
$JK = 0.24018$

$R - \frac{JK \cdot AB}{BK} = 0.00000$

4RST3AB3R10



$N_1 = 2.41885$
$N_2 = 1.55682$
$N_3 = 0.40894$
$N_4 = 0.89086$
$N_5 = 0.61989$
$R = 1.39694$

Unit. $AB := 1$ Given. $N_1 := 2.41885$ $N_2 := 1.55682$ $N_3 := .40894$ $N_4 := .89086$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .61989$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad CN_4 := N_4 + AC$$

$$BN_4 := \sqrt{N_4^2 + AB^2} \qquad EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$$

$$BG := N_4 \cdot \frac{(BN_4 - EN_4)}{BN_4} \qquad FG := AB \cdot \frac{(N_3 - BG)}{N_3}$$

$$R := \frac{N_5 \cdot AB}{FG} \qquad R = 1.396942$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2} = 0$$

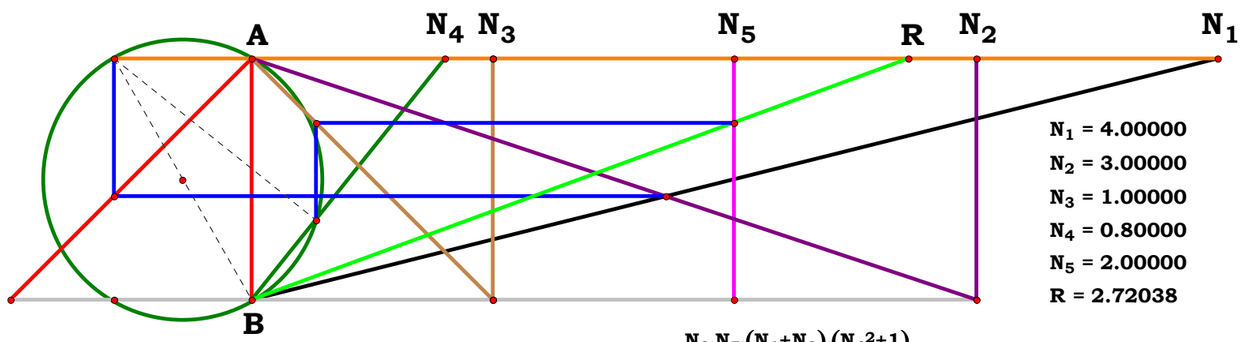
$$R - \frac{N_3 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_1 \cdot (N_4^2 - N_4 + N_3) + N_2 \cdot (N_3 - N_4) + N_3 \cdot N_4^2 \cdot (N_1 + N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (D^2 + N_u^2) \cdot (A + B)}{E \cdot \left[(D^2 - C \cdot D + N_u^2) \cdot (A + B) + B \cdot C \cdot N_u \right]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

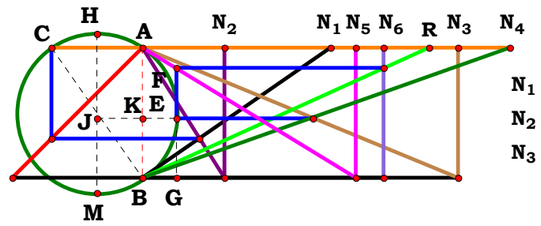
$$R - \frac{X \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (Y^2 + o^2)}{p \cdot \left[X \cdot (Y^2 + o^2) \cdot (V \cdot m + W \cdot l) + Y \cdot n \cdot (V \cdot Y \cdot m - V \cdot m \cdot o - W \cdot l \cdot o) \right]} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.80000$
$N_5 = 2.00000$
$R = 2.72038$

$$\frac{N_3 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_1 \cdot ((N_4^2 - N_4) + N_3) + N_2 \cdot (N_3 - N_4) + N_3 \cdot N_4^2 \cdot (N_1 + N_2)} - R = 0.00000$$

4RST3AB3R11



$N_1 = 1.44059$ $N_4 = 2.81833$
$N_2 = 0.62698$ $N_5 = 1.63690$
$N_3 = 2.42358$ $N_6 = 1.85104$
$R = 2.20035$

Descriptions.

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := .62698$ $N_3 := 2.42358$

$N_4 := 2.81833$ $N_5 := 1.63690$ $N_6 := 1.85104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

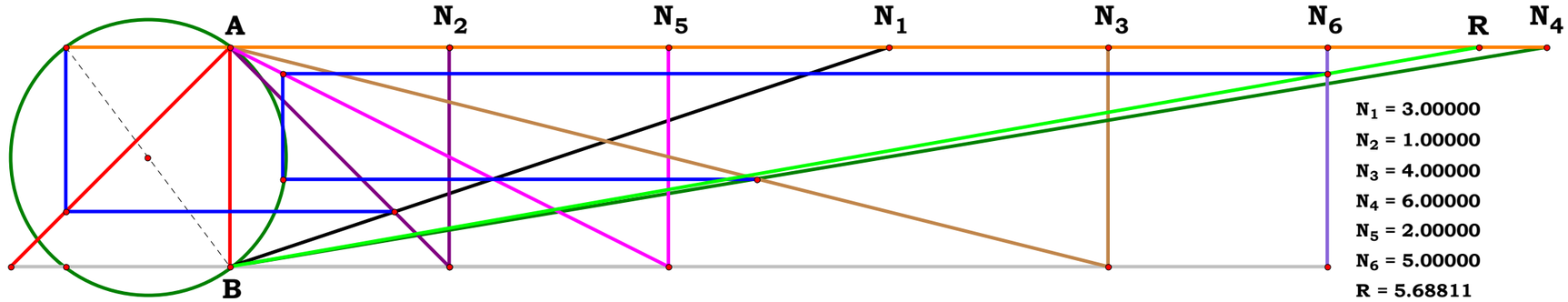
$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

$AC := \frac{N_1}{N_1 + N_2}$ $EG := \frac{N_3 \cdot AB}{N_3 + N_4}$ $HM := \sqrt{AB^2 + AC^2}$

$JM := EG + \frac{HM - AB}{2}$ $JE := \sqrt{JM \cdot (HM - JM)}$

$BG := JE - \frac{AC}{2}$ $FG := \frac{AB \cdot (N_5 - BG)}{N_5}$

$R := \frac{N_6 \cdot AB}{FG}$ $R = 2.200343$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 6.00000$
$N_5 = 2.00000$
$N_6 = 5.00000$
$R = 5.68811$

Definitions.

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$\frac{2 \cdot N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4)}{(N_1 \cdot (N_3 + N_4) + 2 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 + N_2)) - \sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2)}} - R = 0.00000$$

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4)}{N_1 \cdot (N_3 + N_4) + 2 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 + N_2) - \sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2)}} = 0$$

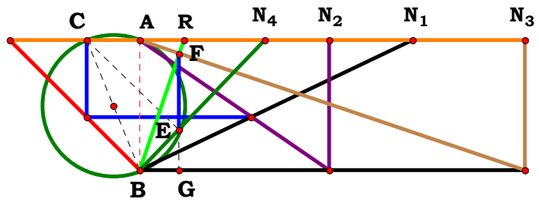
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot (A + B) \cdot (C + D)}{F \cdot \left[(C + D) \cdot \left[B \cdot E + 2 \cdot N_u \cdot (A + B) \right] - E \cdot \sqrt{B^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + 3 \cdot B^2)} \right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot (U \cdot l + V \cdot k) \cdot (W \cdot n + X \cdot m)}{p \cdot \left[2 \cdot Y \cdot (W \cdot n + X \cdot m) \cdot (U \cdot l + V \cdot k) + U \cdot l \cdot o \cdot (W \cdot n + X \cdot m) - o \cdot \sqrt{U^2 \cdot W \cdot l^2 \cdot n \cdot (W \cdot n + 6 \cdot X \cdot m) + U^2 \cdot X^2 \cdot l^2 \cdot m^2 + 4 \cdot V \cdot W \cdot X \cdot k \cdot m \cdot n \cdot (2 \cdot U \cdot l + V \cdot k)} \right]} = 0$$

4RST3AB4R0



$N_1 = 2.08954$
$N_2 = 1.45027$
$N_3 = 2.95630$
$N_4 = 0.95866$
$R = 0.33803$

Unit. $AB := 1$ Given. $N_1 := 2.08954$ $N_2 := 1.45027$ $N_3 := 2.95630$ $N_4 := .95866$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad CN_4 := N_4 + AC \qquad BN_4 := \sqrt{N_4^2 + AB^2}$$

$$EN_4 := \frac{N_4 \cdot CN_4}{BN_4} \qquad BE := BN_4 - EN_4 \qquad BG := \frac{N_4 \cdot BE}{BN_4}$$

$$FG := \frac{AB \cdot (N_3 - BG)}{N_3} \qquad R := \frac{BG \cdot AB}{FG} \qquad R = 0.338032$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC \cdot N_4 - 1)}{N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2} = 0$$

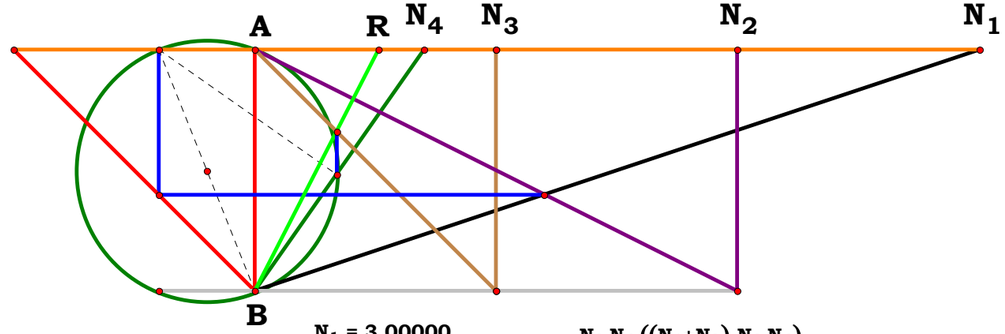
$$R - \frac{N_3 \cdot N_4 \cdot (N_1 + N_2 - N_2 \cdot N_4)}{N_4 \cdot (N_2 \cdot N_4 - N_2 - N_1) + N_3 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot [D \cdot (A + B) - A \cdot N_u]}{(D^2 - C \cdot D + N_u^2) \cdot (A + B) + A \cdot C \cdot N_u} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

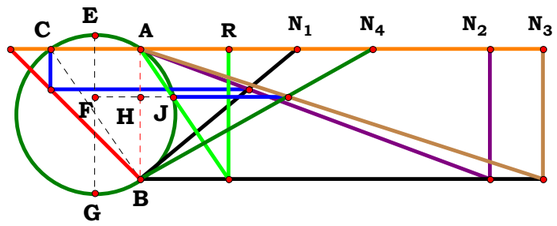
$$R - \frac{Y \cdot Z \cdot (W \cdot n \cdot p - X \cdot Z \cdot m + X \cdot m \cdot p)}{Z \cdot (Y \cdot Z - o \cdot p) \cdot (W \cdot n + X \cdot m) + Y \cdot p^2 \cdot (W \cdot n + X \cdot m) + X \cdot Z^2 \cdot m \cdot o} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.70000$
$R = 0.51116$

$$\frac{N_3 \cdot N_4 \cdot ((N_1 + N_2) - N_2 \cdot N_4)}{N_4 \cdot (N_2 \cdot N_4 - N_2 - N_1) + N_3 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)} - R = 0.00000$$

4RST3AB4R1



$N_1 = 1.19844$
$N_2 = 2.68037$
$N_3 = 3.09190$
$N_4 = 1.78196$
$R = 0.67615$

Unit. $AB := 1$ Given. $N_1 := 1.19844$ $N_2 := 2.68037$ $N_3 := 3.09190$ $N_4 := 1.78196$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

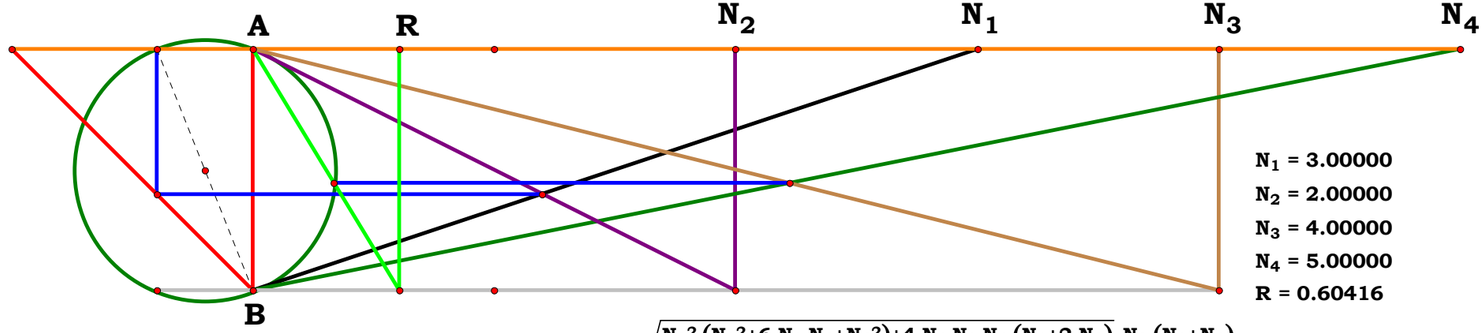
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AH := \frac{AB \cdot N_4}{N_4 + N_3}$

$EG := \sqrt{AB^2 + AC^2}$ $EF := AH + \frac{(EG - AB)}{2}$

$FJ := \sqrt{EF \cdot (EG - EF)}$ $HJ := FJ - \frac{AC}{2}$

$AR := \frac{HJ \cdot AB}{AH}$ $AR = 0.676144$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.60416$

$\frac{\sqrt{N_2^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + 4 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 + 2 \cdot N_2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot (N_1 + N_2)} - R = 0.00000$

Definitions.

$$AR - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$AR - \frac{\sqrt{4 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 + 2 \cdot N_2) + N_2^2 \cdot N_3 \cdot (N_3 + 6 \cdot N_4) + N_2^2 \cdot N_4^2} - N_2 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot N_4} = 0$$

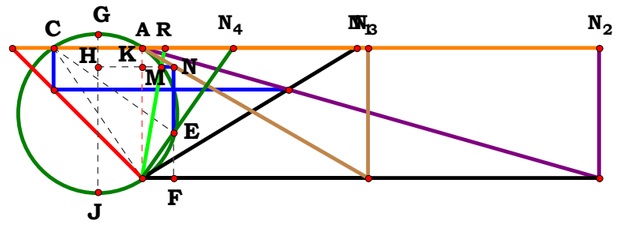
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$AR - \frac{\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)}{2 \cdot C \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$AR - \frac{\sqrt{X^2 \cdot m^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (2 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 3 \cdot X^2 \cdot m^2)} - X \cdot m \cdot (Y \cdot p + Z \cdot o)}{2 \cdot Z \cdot o \cdot (W \cdot n + X \cdot m)} = 0$$

4RST3AB4R2



$N_1 = 1.64399$
$N_2 = 3.50366$
$N_3 = 1.73589$
$N_4 = 0.69715$
$R = 0.17156$

Unit. $AB := 1$ Given. $N_1 := 1.64399$ $N_2 := 3.50366$ $N_3 := 1.73589$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $N_4 := .69715$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

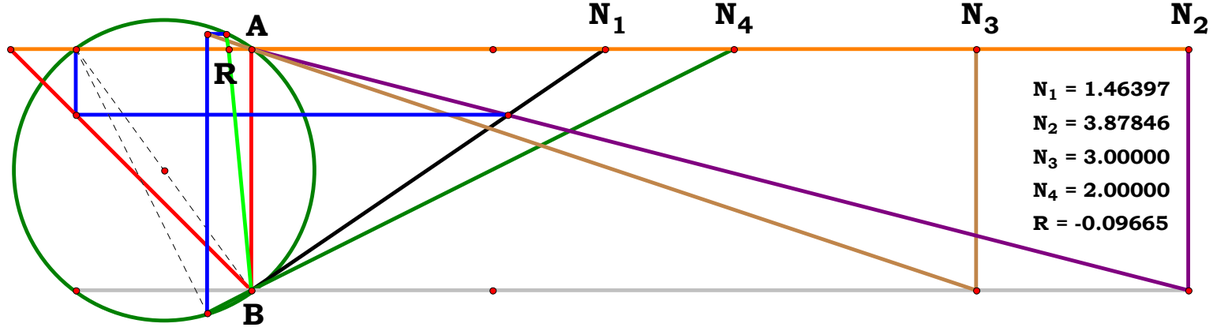
$AC := \frac{N_2}{N_1 + N_2}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BF := \frac{N_4 \cdot (BN_4 - EN_4)}{BN_4}$ $AK := \frac{AB \cdot BF}{N_3}$

$GJ := \sqrt{AB^2 + AC^2}$ $GH := AK + \frac{GJ - AB}{2}$

$HM := \sqrt{GH \cdot (GJ - GH)}$ $KM := HM - \frac{AC}{2}$

$R := \frac{KM \cdot AB}{AB - AK}$ $R = 0.171558$



$N_1 = 1.46397$
$N_2 = 3.87846$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = -0.09665$

$$\frac{\sqrt{((N_2 \cdot N_3) \cdot (N_4^2+1))^2 - 4 \cdot N_4 \cdot (N_4 \cdot ((N_1+N_2) - N_2 \cdot N_4) - N_3 \cdot (N_1+N_2) \cdot (N_4^2+1)) \cdot ((N_1+N_2) - N_2 \cdot N_4)} - (N_2 \cdot N_3) \cdot (N_4^2+1)}{(2 \cdot (N_2 \cdot ((N_4^2 - N_4) + N_3) + N_1 \cdot (N_3 - N_4) + N_3 \cdot N_4^2 \cdot (N_1+N_2)))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_3^2 - 4 \cdot N_4^2 - 4 \cdot AC \cdot N_4^3 \cdot (AC \cdot N_4 - 2) + 4 \cdot N_3 \cdot N_4 \cdot (N_4^2 + 1) - AC \cdot N_3 \cdot N_4^2 \cdot (4 \cdot N_4^2 - 2 \cdot AC \cdot N_3 - AC \cdot N_3 \cdot N_4^2 + 4)} - AC \cdot N_3 \cdot (N_4^2 + 1)}{2 \cdot (N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2)} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot N_3^2 \cdot (N_4^2+1)^2 - 4 \cdot N_4 \cdot [N_4 \cdot (N_1 + N_2 - N_2 \cdot N_4) - N_3 \cdot (N_1+N_2) \cdot (N_4^2+1)] \cdot (N_1 + N_2 - N_2 \cdot N_4)} - N_2 \cdot N_3 \cdot (N_4^2+1)}{2 \cdot (N_2 \cdot N_4^2 + N_1 \cdot N_3 - N_1 \cdot N_4 + N_2 \cdot N_3 - N_2 \cdot N_4 + N_1 \cdot N_3 \cdot N_4^2 + N_2 \cdot N_3 \cdot N_4^2)} = 0$$

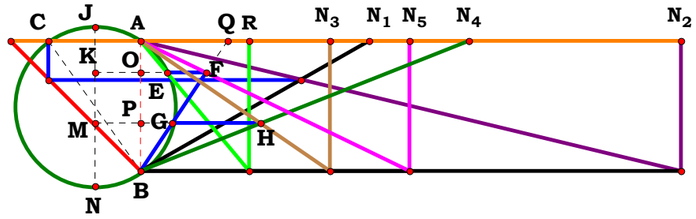
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot (D^2 + N_u^2) - \sqrt{A^2 \cdot (D^2 + N_u^2)^2 + 4 \cdot C \cdot [D \cdot (A+B) - A \cdot N_u] \cdot [D^2 \cdot (A+B) - C \cdot [D \cdot (A+B) - A \cdot N_u] + N_u^2 \cdot (A+B)]}}{2 \cdot [C \cdot (A \cdot D + B \cdot D - A \cdot N_u) - (D^2 + N_u^2) \cdot (A+B)]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot X^2 \cdot m^2 \cdot (Z^2+p^2)^2 + 4 \cdot Y \cdot Z \cdot o \cdot (Z^2+p^2) \cdot (W \cdot n + X \cdot m) \cdot (W \cdot n \cdot p - X \cdot Z \cdot m + X \cdot m \cdot p) - 4 \cdot Z^2 \cdot o^2 \cdot (W \cdot n \cdot p - X \cdot Z \cdot m + X \cdot m \cdot p)^2} - X \cdot Y \cdot m \cdot (Z^2+p^2)}{2 \cdot (W \cdot Y \cdot Z^2 \cdot n + X \cdot Y \cdot Z^2 \cdot m + W \cdot Y \cdot n \cdot p^2 + X \cdot Y \cdot m \cdot p^2 + X \cdot Z^2 \cdot m \cdot o - W \cdot Z \cdot n \cdot o \cdot p - X \cdot Z \cdot m \cdot o \cdot p)} = 0$$

4RST3AB4R3



$N_1 = 1.75053$
$N_2 = 4.14292$
$N_3 = 1.45500$
$N_4 = 2.51808$
$N_5 = 2.06307$
R = 0.83282

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 4.14292$ $N_3 := 1.45500$ $N_4 := 2.51808$ $N_5 := 2.06307$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

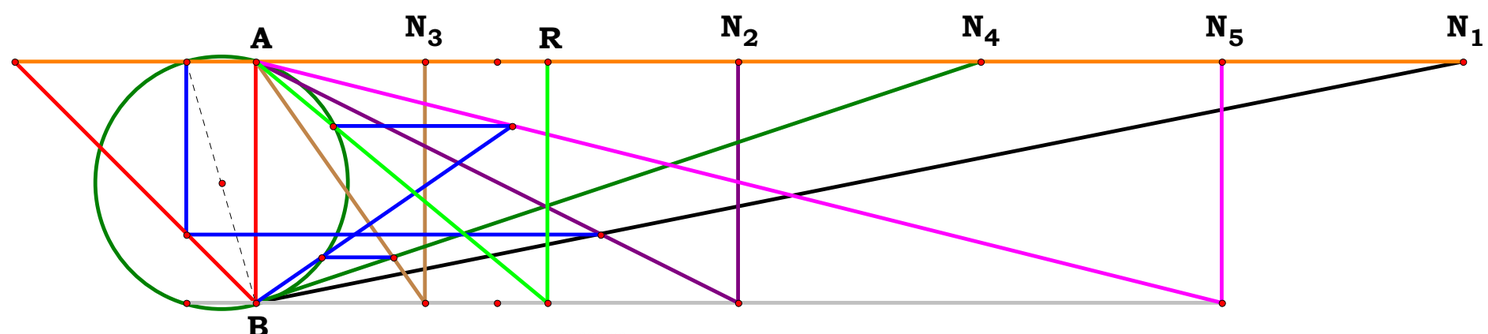
$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad AR := \frac{EO \cdot AB}{AO}$$

$AR = 0.832823$

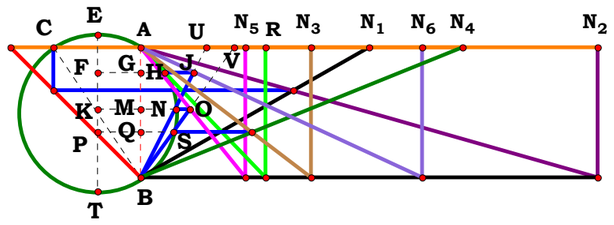


$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 3.00000$
$N_5 = 4.00000$
R = 1.20913

AB = 1.00000
AC = 0.28571
BP = 0.18919
JN = 1.04002
JM = 0.83082
GM = 0.41690
PG = 0.27404

AQ = 1.44851
AO = 0.26585
JK = 0.28586
EK = 0.46431
EO = 0.32145
$R - \frac{EO \cdot AB}{AO} = 0.00000$

4RST3AB4R4



$N_1 = 1.75053$
$N_2 = 3.50366$
$N_3 = 1.30972$
$N_4 = 2.46965$

$N_5 = 0.80392$
$N_6 = 2.15993$
$R = 0.95638$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 3.50366$ $N_3 := 1.30972$ $N_4 := 2.46965$ $N_5 := .80392$ $N_6 := 2.15993$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ}$$

$$BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

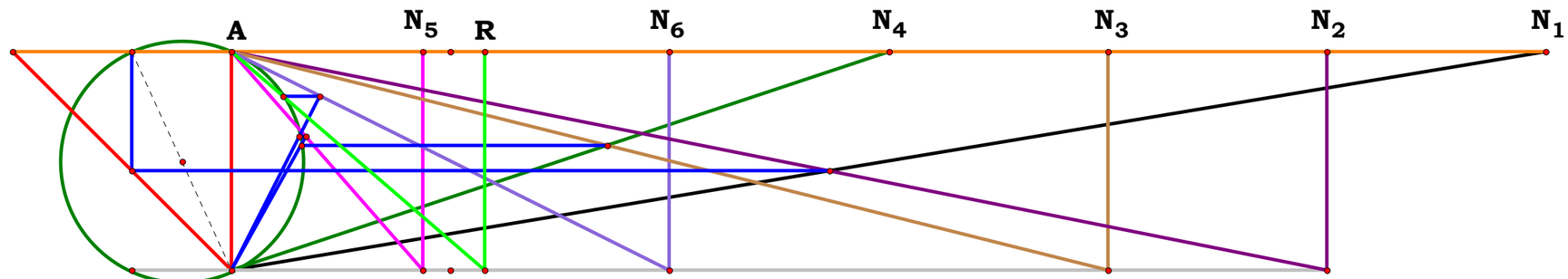
$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{AG}$$

$AR = 0.956384$



$N_1 = 6.00000$
$N_2 = 5.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 0.87451$
$N_6 = 2.00000$
$R = 1.15772$

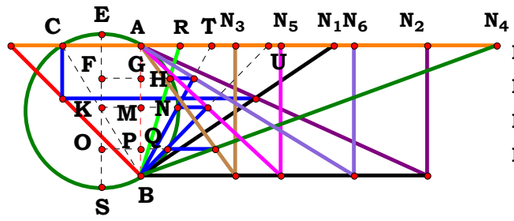
$AB = 1.00000$
$AC = 0.45455$
$BQ = 0.57143$
$ET = 1.09846$
$EP = 0.47780$
$PS = 0.54456$
$QS = 0.31729$

$AV = 0.55526$
$BM = 0.61164$
$KT = 0.66087$
$KN = 0.53776$
$MN = 0.31049$
$AU = 0.50763$
$BG = 0.79756$

$AG = 0.20244$
$EF = 0.25166$
$FH = 0.46164$
$GH = 0.23436$
$R - \frac{GH \cdot AB}{AG} = 0.00000$

Definitions.

4RST3AB4R5



$N_1 = 1.47933$ $N_5 = 1.07512$
$N_2 = 2.19608$ $N_6 = 1.63690$
$N_3 = 0.72857$ $R = 0.30175$
$N_4 = 2.73116$

Unit. $AB := 1$ **Given.** $N_1 := 1.47933$ $N_2 := 2.19608$ $N_3 := .72857$

$N_4 := 2.73116$ $N_5 := 1.07512$ $N_6 := 1.63690$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

$$KN := \sqrt{KS \cdot (ES - KS)}$$

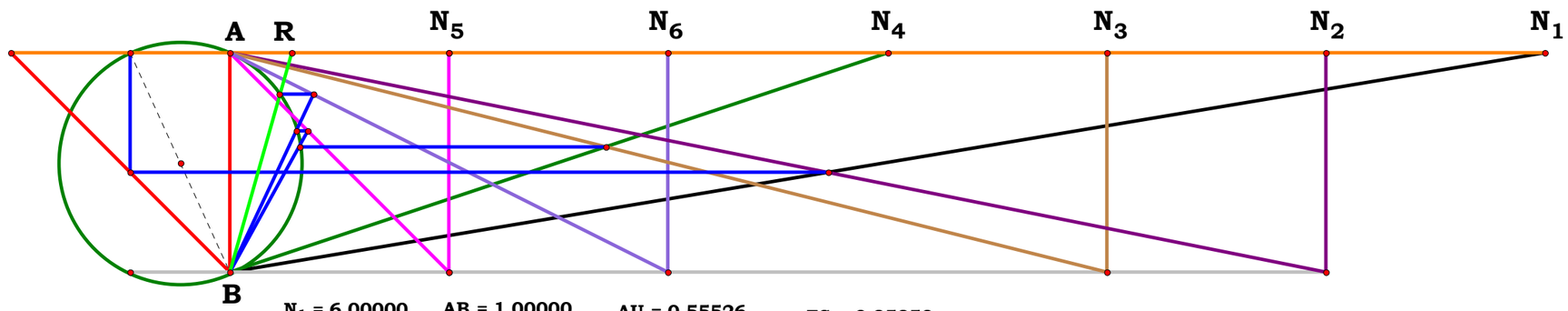
$$MN := KN - \frac{AC}{2}$$

$$AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

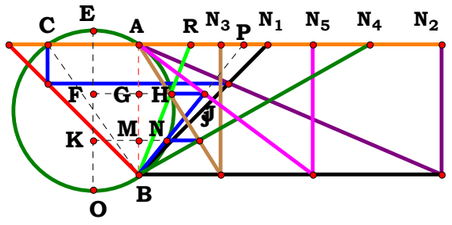
$$AR := \frac{GH \cdot AB}{BG} \qquad AR = 0.301751$$



$N_1 = 6.00000$ $AB = 1.00000$ $AU = 0.55526$ $FS = 0.85853$
$N_2 = 5.00000$ $AC = 0.45455$ $BM = 0.64298$ $FH = 0.45386$
$N_3 = 4.00000$ $BP = 0.57143$ $KS = 0.69221$ $GH = 0.22659$
$N_4 = 3.00000$ $ES = 1.09846$ $KN = 0.53029$ $R - \frac{GH \cdot AB}{BG} = 0.00000$
$N_5 = 1.00000$ $OS = 0.62066$ $MN = 0.30302$
$N_6 = 2.00000$ $OQ = 0.54456$ $AT = 0.47127$
$R = 0.27998$ $PQ = 0.31729$ $BG = 0.80930$

Definitions.

4RST3AB4R6



$N_1 = 0.98536$
$N_2 = 2.32200$
$N_3 = 0.63171$
$N_4 = 1.77227$
$N_5 = 1.33664$
$R = 0.39643$

Unit. $AB := 1$ **Given.** $N_1 := .98536$ $N_2 := 2.3220$ $N_3 := .63171$ $N_4 := 1.77227$ $N_5 := 1.33664$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

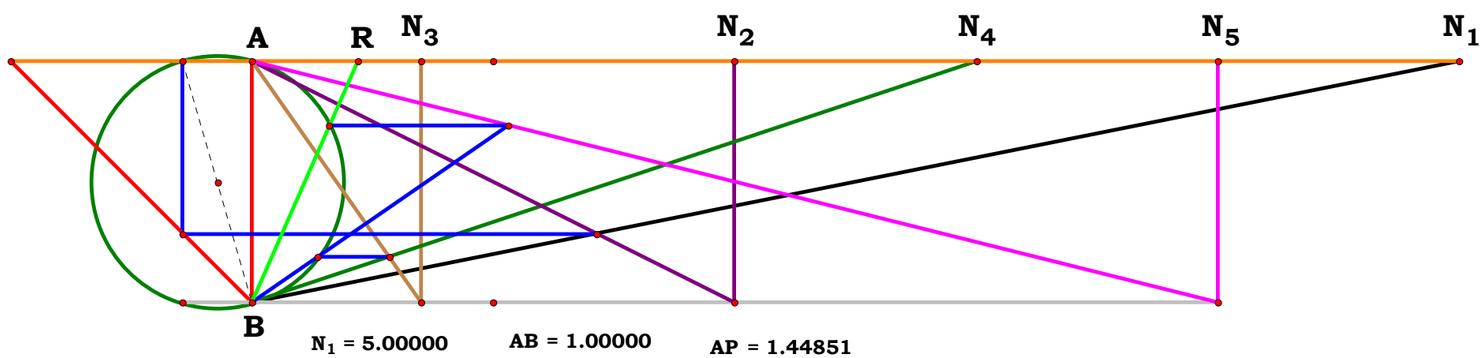
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{BG}$$

$AR = 0.396433$



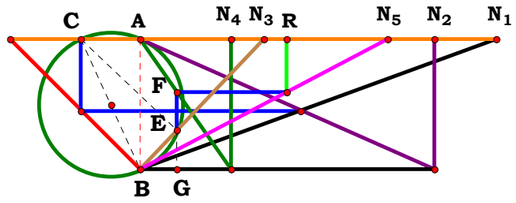
$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 3.00000$
$N_5 = 4.00000$
$R = 0.43786$

$AB = 1.00000$
$AC = 0.28571$
$BM = 0.18919$
$EO = 1.04002$
$KO = 0.20920$
$KN = 0.41690$
$MN = 0.27404$

$AP = 1.44851$
$BG = 0.73415$
$FO = 0.75415$
$FH = 0.46431$
$GH = 0.32145$
$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

4RST3AB4R7



$N_1 = 2.72880$
$N_2 = 2.25419$
$N_3 = 0.95134$
$N_4 = 0.69715$
$N_5 = 1.89841$
$R = 1.12379$

Unit. $AB := 1$ Given. $N_1 := 2.72880$ $N_2 := 2.25419$ $N_3 := .95134$ $N_4 := .69715$ $N_5 := 1.89841$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

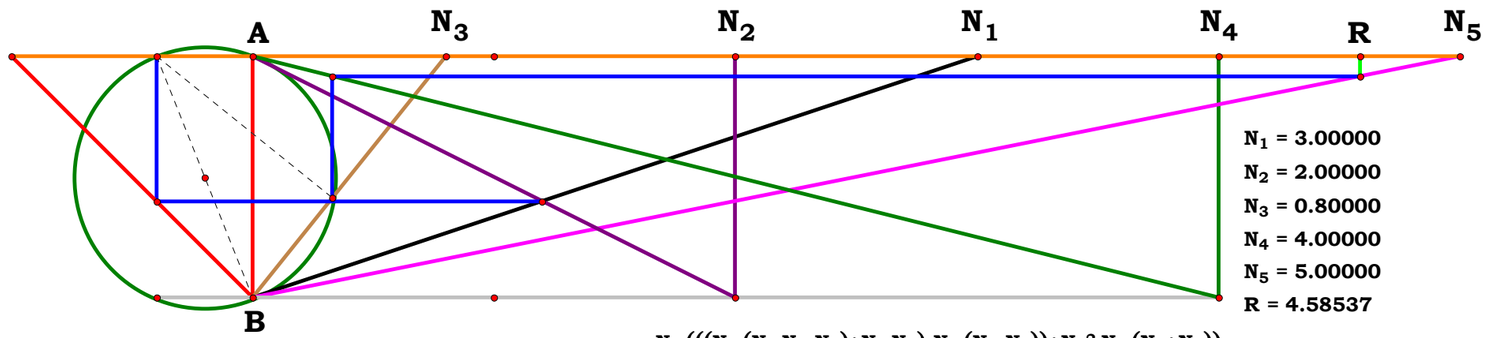
Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3} \qquad FG := \frac{AB \cdot (N_4 - BG)}{N_4}$$

$$R := \frac{N_5 \cdot FG}{AB} \qquad R = 1.123786$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.80000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 4.58537$

$N_5 \cdot (((N_3 \cdot (N_2 \cdot N_3 - N_1) + N_1 \cdot N_4) - N_2 \cdot (N_3 - N_4)) + N_3^2 \cdot N_4 \cdot (N_1 + N_2))$

$$\frac{N_5 \cdot (((N_3 \cdot (N_2 \cdot N_3 - N_1) + N_1 \cdot N_4) - N_2 \cdot (N_3 - N_4)) + N_3^2 \cdot N_4 \cdot (N_1 + N_2))}{N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_5 \cdot \left(N_4 - N_3 + N_3^{\,2} \cdot N_4 + AC \cdot N_3^{\,2}\right)}{N_4 \cdot \left(N_3^{\,2} + 1\right)} = 0$$

$$R - \frac{N_5 \cdot \left[N_3 \cdot \left(N_2 \cdot N_3 - N_1\right) + N_1 \cdot N_4 - N_2 \cdot \left(N_3 - N_4\right) + N_3^{\,2} \cdot N_4 \cdot \left(N_1 + N_2\right)\right]}{N_4 \cdot \left(N_1 + N_2\right) \cdot \left(N_3^{\,2} + 1\right)} = 0$$

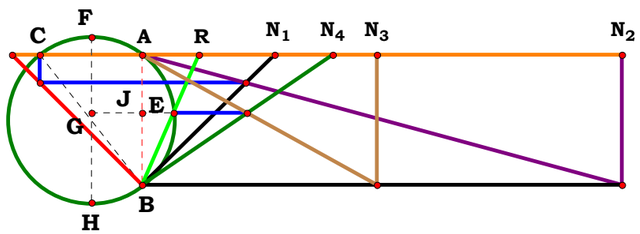
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{\left[N_u \cdot \left(C^2 - D \cdot C + N_u^{\,2}\right)\right] \cdot (A + B) + A \cdot D \cdot N_u^{\,2}}{E \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left(Y \cdot X^2 - o \cdot X \cdot n + Y \cdot n^2\right) \cdot (V \cdot m + W \cdot l) + W \cdot X^2 \cdot Z \cdot l \cdot o}{Y \cdot p \cdot (V \cdot m + W \cdot l) \cdot \left(X^2 + n^2\right)} = 0$$

4RST3AB4R8



$N_1 = 1.01441$
$N_2 = 3.67800$
$N_3 = 1.80369$
$N_4 = 1.46232$
$R = 0.43680$

Unit. $AB := 1$ Given. $N_1 := 1.01441$ $N_2 := 3.67800$ $N_3 := 1.8036$ $N_4 := 1.46232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

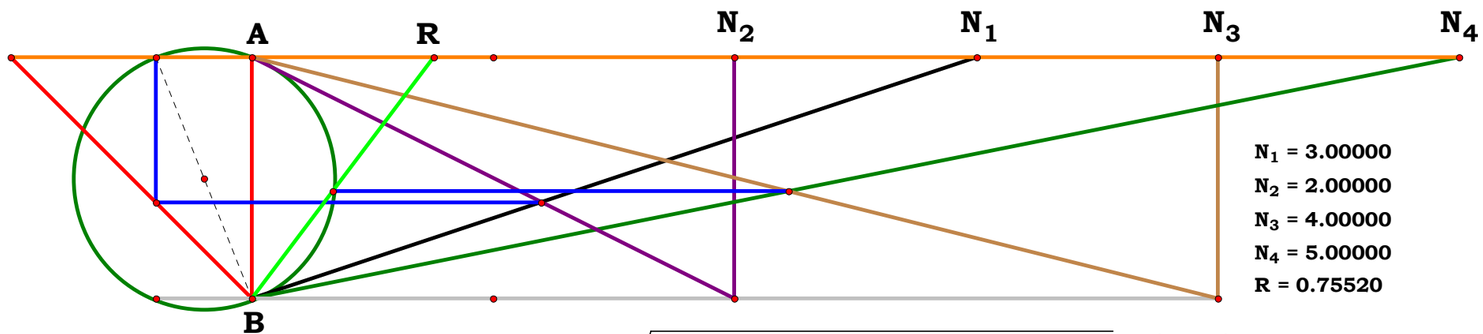
Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BJ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$FH := \sqrt{AB^2 + AC^2} \qquad GH := BJ + \frac{FH - AB}{2}$$

$$GE := \sqrt{GH \cdot (FH - GH)} \qquad JE := GE - \frac{AC}{2}$$

$$R := \frac{JE \cdot AB}{BJ} \qquad R = 0.436811$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.75520$

$$\frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot (N_1 + N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)} - N_2 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot N_3} = 0$$

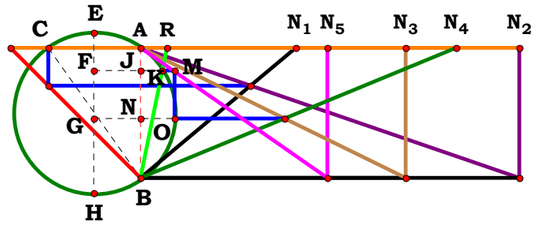
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{A^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (3 \cdot A^2 + 4 \cdot A \cdot B + 2 \cdot B^2)} - A \cdot (C + D)}{2 \cdot D \cdot (A + B)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (2 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 3 \cdot X^2 \cdot m^2)} - X \cdot m \cdot (Y \cdot p + Z \cdot o)}{2 \cdot Y \cdot p \cdot (W \cdot n + X \cdot m)} = 0$$

4RST3AB4R9



$N_1 = 1.18876$
$N_2 = 2.90314$
$N_3 = 2.03615$
$N_4 = 2.42122$
$N_5 = 1.43350$
$R = 0.20423$

Unit. $AB := 1$ Given. $N_1 := 1.18876$ $N_2 := 2.90314$ $N_3 := 2.03615$ $N_4 := 2.42122$ $N_5 := 1.4335$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

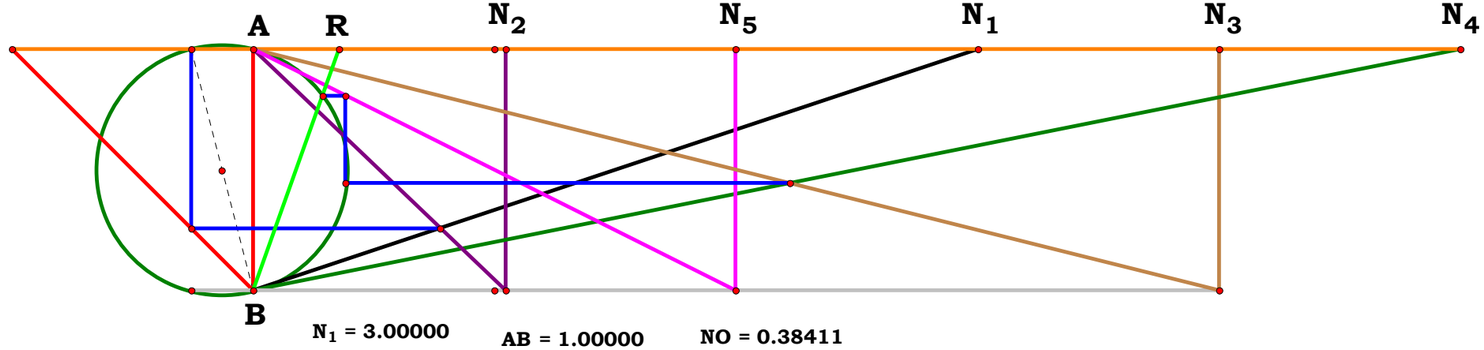
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$AR := \frac{JK \cdot AB}{BK} \qquad AR = 0.204231$$



$N_1 = 3.00000$
$N_2 = 1.04706$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 0.35306$

$AB = 1.00000$
$AC = 0.25872$
$EH = 1.03293$
$BN = 0.44444$
$GH = 0.46091$
$GO = 0.51347$

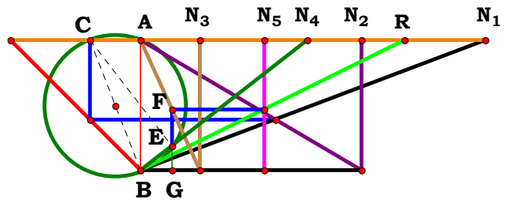
$NO = 0.38411$
$BK = 0.80795$
$FH = 0.82441$
$FK = 0.41461$
$JK = 0.28525$
$R - \frac{JK \cdot AB}{BK} = 0.00000$

Definitions.

$$AR - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot (AC + N_5) + 4 \cdot N_3^2 \ \ldots \right.} \right.}{\sqrt{N_5^2 \cdot (N_3 + N_4)^3} \cdot \left[AC \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]}$$
$$\left. \left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[AC^2 \cdot (N_5^2 - 2) - 2 \cdot AC \cdot N_5 \right] - 4 \cdot N_3 \right] \right] - AC \cdot \sqrt{N_5^2 \cdot (N_3 + N_4)^3} \right] = 0$$

$$AR - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\left(\frac{N_2}{N_1 + N_2} \right) + N_5 \right] + 4 \cdot N_3^2 \ \ldots \right.} \right.}{\sqrt{N_5^2 \cdot (N_3 + N_4)^3} \cdot \left[\left(\frac{N_2}{N_1 + N_2} \right) \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]}$$
$$\left. \left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_5^2 - 2) - 2 \cdot \left(\frac{N_2}{N_1 + N_2} \right) \cdot N_5 \right] - 4 \cdot N_3 \right] \right] - \left(\frac{N_2}{N_1 + N_2} \right) \cdot \sqrt{N_5^2 \cdot (N_3 + N_4)^3} \right] = 0$$

4RST3AB4R10



$N_1 = 2.64163$
$N_2 = 1.69242$
$N_3 = 0.45737$
$N_4 = 1.27829$
$N_5 = 0.94921$
$R = 2.02571$

Unit. $AB := 1$ Given. $N_1 := 2.64163$ $N_2 := 1.69242$ $N_3 := .45737$ $N_4 := 1.27829$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .94921$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad CN_4 := N_4 + AC \qquad BN_4 := \sqrt{N_4^2 + AB^2}$$

$$EN_4 := \frac{N_4 \cdot CN_4}{BN_4} \qquad BG := N_4 \cdot \frac{(BN_4 - EN_4)}{BN_4}$$

$$FG := AB \cdot \frac{(N_3 - BG)}{N_3} \qquad R := \frac{N_5 \cdot AB}{FG} \qquad R = 2.025711$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2} = 0$$

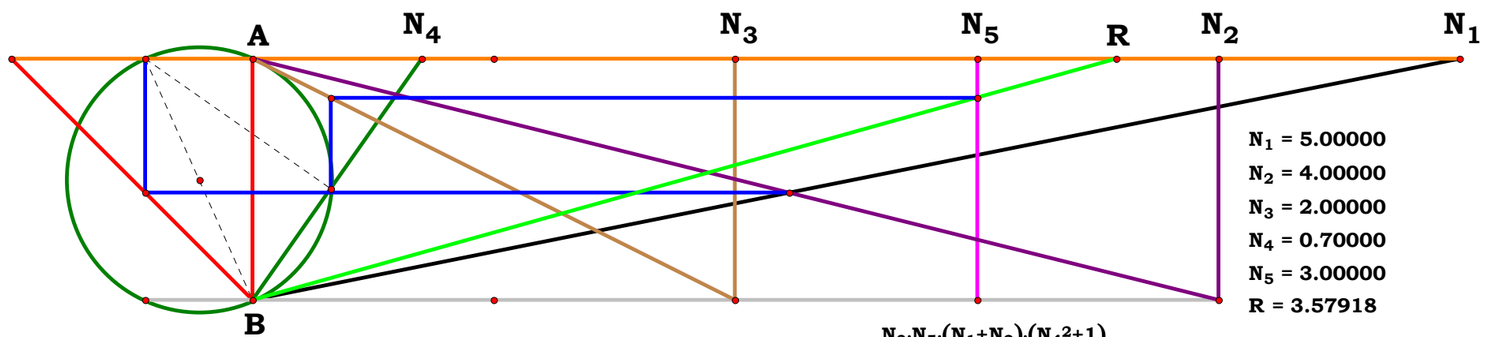
$$R - \frac{N_3 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{(N_3 - N_4 + N_3 \cdot N_4^2 + N_4^2) \cdot N_2 + N_1 \cdot (N_3 \cdot N_4^2 - N_4 + N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (D^2 + N_u^2) \cdot (A + B)}{E \cdot [(A + B) \cdot N_u^2 + A \cdot C \cdot N_u + -D \cdot (C - D) \cdot (A + B)]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

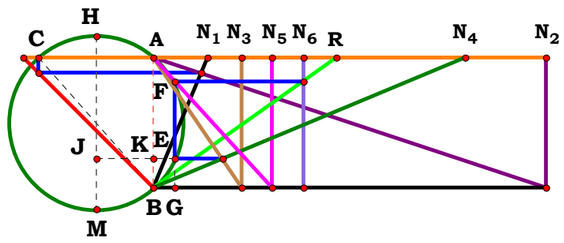
$$R - \frac{X \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (Y^2 + o^2)}{p \cdot [X \cdot (Y^2 + o^2) \cdot (V \cdot m + W \cdot l) + Y \cdot n \cdot (W \cdot Y \cdot l - V \cdot m \cdot o - W \cdot l \cdot o)]} = 0$$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 0.70000$
$N_5 = 3.00000$
$R = 3.57918$

$$\frac{N_3 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_4^2 + 1)}{N_2 \cdot ((N_3 - N_4) + N_3 \cdot N_4^2 + N_4^2) + N_1 \cdot ((N_3 \cdot N_4^2 - N_4) + N_3)} - R = 0.00000$$

4RST3AB4R11



$N_1 = 0.41390$
$N_2 = 3.00969$
$N_3 = 0.68014$
$N_4 = 2.39216$
$N_5 = 0.91046$
$N_6 = 1.15261$
$R = 1.40787$

Unit. $AB := 1$ Given. $N_1 := .41390$ $N_2 := 3.00969$ $N_3 := .68014$

$N_4 := 2.39216$ $N_5 := .91046$ $N_6 := 1.15261$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

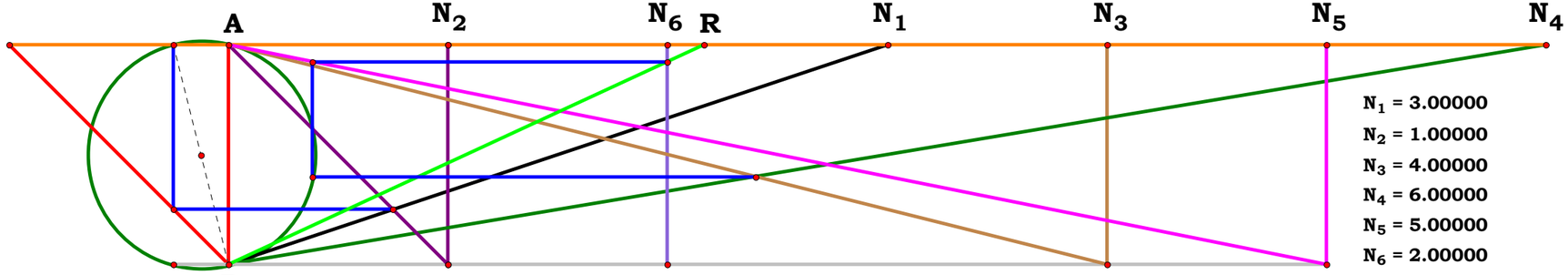
Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EG := \frac{N_3 \cdot AB}{N_3 + N_4} \qquad HM := \sqrt{AB^2 + AC^2} \qquad JM := EG - \frac{AB}{2} + \frac{HM}{2}$$

$$JE := \sqrt{JM \cdot (HM - JM)}$$

$$BG := JE - \frac{AC}{2} \qquad FG := \frac{AB \cdot (N_5 - BG)}{N_5}$$

$$R := \frac{N_6 \cdot AB}{FG} \qquad R = 1.407873$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 6.00000$
$N_5 = 5.00000$
$N_6 = 2.00000$
$R = 2.16478$

Definitions.

B

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$\frac{2 \cdot N_5 \cdot N_6 \cdot ((N_1 + N_2) \cdot (N_3 + N_4))}{(N_2 \cdot (N_3 + N_4) + 2 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 + N_2)) - \sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)}} - R = 0.00000$$

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot (N_2 + 2 \cdot N_1 \cdot N_5 + 2 \cdot N_2 \cdot N_5) - \sqrt{N_2^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)}} = 0$$

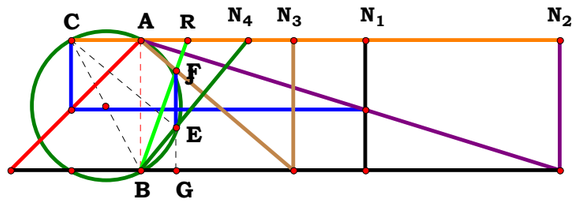
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{2 \cdot N_u^2 \cdot (A + B) \cdot (C + D)}{F \cdot \left[(C + D) \cdot \left[A \cdot E + 2 \cdot N_u \cdot (A + B) \right] - E \cdot \sqrt{A^2 \cdot (C^2 + D^2) + 2 \cdot C \cdot D \cdot (3 \cdot A^2 + 4 \cdot A \cdot B + 2 \cdot B^2)} \right]} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{2 \cdot Y \cdot Z \cdot (U \cdot l + V \cdot k) \cdot (W \cdot n + X \cdot m)}{p \cdot \left[(W \cdot n + X \cdot m) \cdot (2 \cdot U \cdot Y \cdot l + 2 \cdot V \cdot Y \cdot k + V \cdot k \cdot o) - o \cdot \sqrt{V^2 \cdot k^2 \cdot (W^2 \cdot n^2 + X^2 \cdot m^2) + 2 \cdot X \cdot W \cdot m \cdot n \cdot (2 \cdot U^2 \cdot l^2 + 4 \cdot U \cdot V \cdot k \cdot l + 3 \cdot V^2 \cdot k^2)} \right]} = 0$$

4RST3AB5R0



$N_1 = 1.72148$
$N_2 = 3.21309$
$N_3 = 1.17412$
$N_4 = 0.82306$
$R = 0.35791$

Unit. $AB := 1$ Given. $N_1 := 1.72148$ $N_2 := 3.21309$ $N_3 := 1.17412$ $N_4 := .82306$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

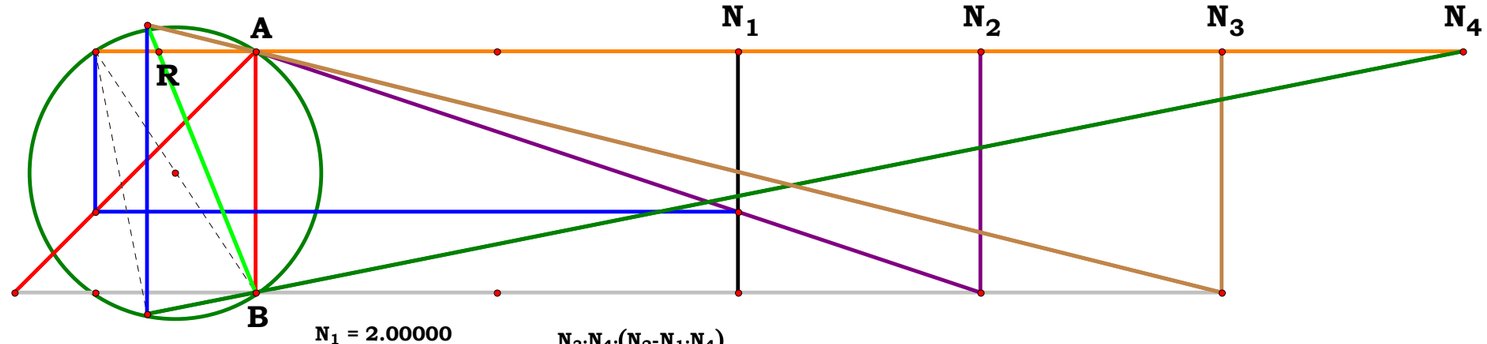
$AC := \frac{N_1}{N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BE := BN_4 - EN_4$ $BG := \frac{N_4 \cdot BE}{BN_4}$

$FG := \frac{AB \cdot (N_3 - BG)}{N_3}$ $R := \frac{BG \cdot AB}{FG}$

$R = 0.357913$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = -0.40346$

$\frac{N_3 \cdot N_4 \cdot (N_2 - N_1 \cdot N_4)}{N_1 \cdot N_4^2 + N_2 \cdot ((N_3 \cdot N_4^2 - N_4) + N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC \cdot N_4 - 1)}{N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot (N_2 - N_1 \cdot N_4)}{N_1 \cdot N_4^2 + N_2 \cdot (N_3 \cdot N_4^2 - N_4 + N_3)} = 0$$

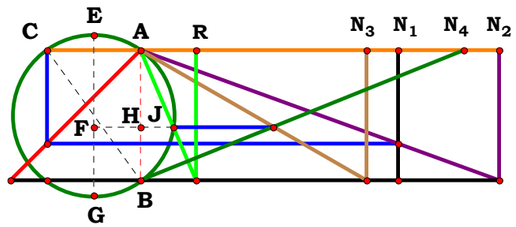
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (A \cdot D - B \cdot N_u)}{A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (X \cdot m \cdot p - W \cdot Z \cdot n)}{Z^2 \cdot (X \cdot Y \cdot m + W \cdot n \cdot o) + X \cdot m \cdot p \cdot (Y \cdot p - Z \cdot o)} = 0$$

4RST3AB5R1



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 1.73589$
$N_4 = 2.47933$
$R = 0.42533$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 1.73589$ $N_4 := 2.47933$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

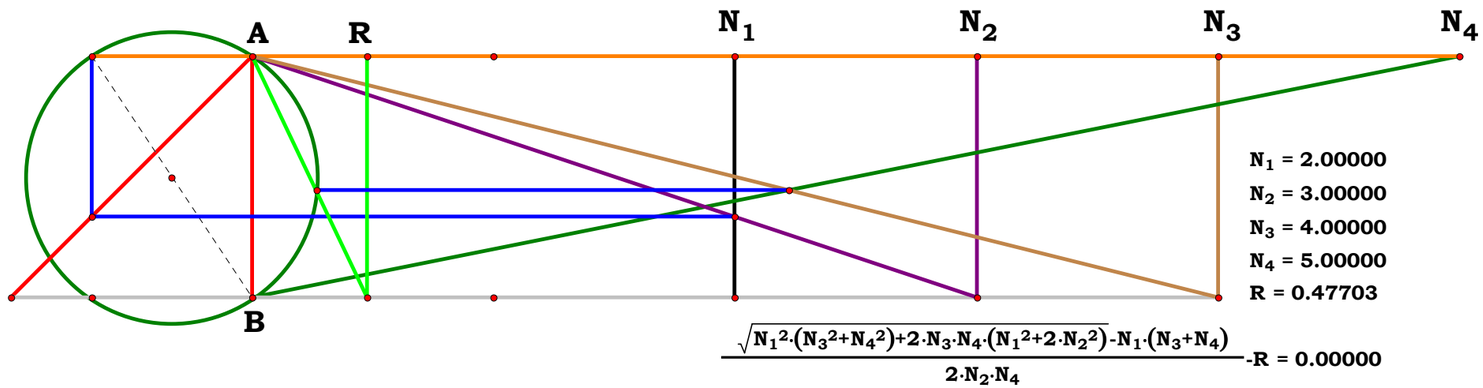
Descriptions.

$AC := \frac{N_1}{N_2}$ $AH := \frac{AB \cdot N_4}{N_4 + N_3}$

$EG := \sqrt{AB^2 + AC^2}$ $EF := AH + \frac{(EG - AB)}{2}$

$FJ := \sqrt{EF \cdot (EG - EF)}$ $HJ := FJ - \frac{AC}{2}$

$R := \frac{HJ \cdot AB}{AH}$ $R = 0.425332$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.47703$

$\frac{\sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot N_4} = 0$$

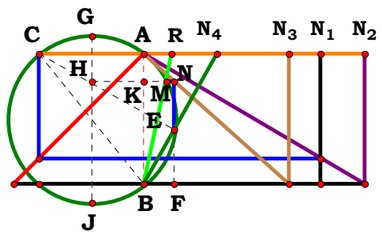
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot D + B^2 \cdot C^2 + 2 \cdot B^2 \cdot C \cdot D + B^2 \cdot D^2} - B \cdot (C + D)}{2 \cdot A \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot (Y \cdot p + Z \cdot o)^2 + 4 \cdot X^2 \cdot Y \cdot Z \cdot m^2 \cdot o \cdot p} - W \cdot n \cdot (Y \cdot p + Z \cdot o)}{2 \cdot X \cdot Z \cdot m \cdot o} = 0$$

4RST3AB5R2



$N_1 = 1.35342$
$N_2 = 1.69242$
$N_3 = 1.11600$
$N_4 = 0.56155$
$R = 0.21705$

Unit. $AB := 1$ **Given.** $N_1 := 1.35342$ $N_2 := 1.69242$ $N_3 := 1.11600$ $N_4 := .56155$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

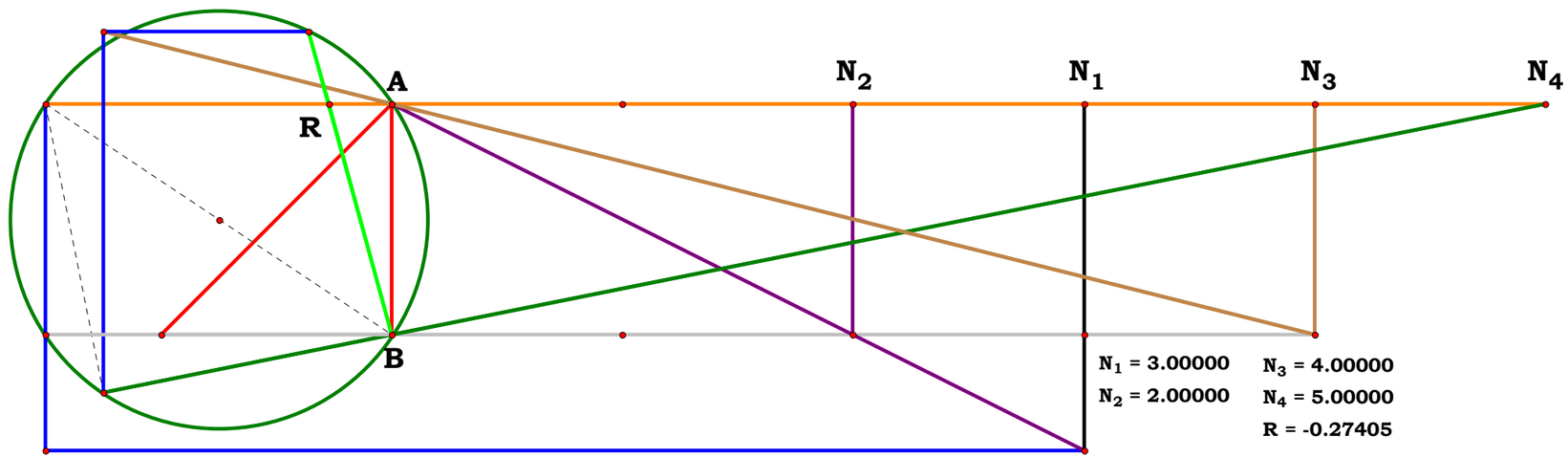
$AC := \frac{N_1}{N_2}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BF := \frac{N_4 \cdot (BN_4 - EN_4)}{BN_4}$

$AK := \frac{AB \cdot BF}{N_3}$ $GJ := \sqrt{AB^2 + AC^2}$

$GH := AK + \frac{GJ - AB}{2}$ $HM := \sqrt{GH \cdot (GJ - GH)}$

$KM := HM - \frac{AC}{2}$ $R := \frac{KM \cdot AB}{AB - AK}$ $R = 0.217052$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = -0.27405$

$\frac{\sqrt{(N_1 \cdot N_3 \cdot (N_4^2+1))^2 - 4 \cdot N_4 \cdot (N_1 \cdot N_4 - N_2) \cdot (N_4 \cdot (N_1 \cdot N_4 - N_2) + N_2 \cdot N_3 \cdot (N_4^2+1))} - N_1 \cdot N_3 \cdot (N_4^2+1)}{2 \cdot (((N_1 \cdot N_4^2 + N_2 \cdot N_3) - N_2 \cdot N_4) + N_2 \cdot N_3 \cdot N_4^2)} - R = 0.00000$

Definitions.

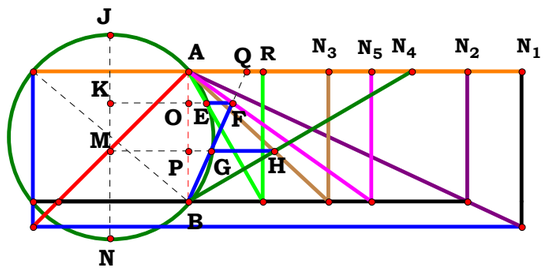
$$R - \frac{N_3 \cdot (N_4^2+1) \cdot \left[AC \cdot \sqrt{\left[N_3 \cdot (N_4^2+1) \right]^2} - \sqrt{AC \cdot N_3 \cdot N_4^2 \cdot (2 \cdot AC \cdot N_3 - 4 \cdot N_4^2 + AC \cdot N_3 \cdot N_4^2 - 4) + AC^2 \cdot N_3^2 - 4 \cdot AC \cdot N_4^3 \cdot (AC \cdot N_4 - 2) + 4 \cdot N_3 \cdot N_4 \cdot (N_4^2+1) - 4 \cdot N_4^2} \right]}{2 \cdot \sqrt{\left[N_3 \cdot (N_4^2+1) \right]^2} \cdot (N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2)} = 0$$

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_4^2+1)^2 - 4 \cdot N_4^2 \cdot (N_2 - N_1 \cdot N_4)^2 + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_2 - N_1 \cdot N_4) \cdot (N_4^2+1)} - N_1 \cdot N_3 \cdot (N_4^2+1)}{2 \cdot (N_1 \cdot N_4^2 + N_2 \cdot N_3 - N_2 \cdot N_4 + N_2 \cdot N_3 \cdot N_4^2)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{B \cdot (D^2 + N_u^2) - \sqrt{B^2 \cdot (D^2 + N_u^2)^2 - 4 \cdot C^2 \cdot (A \cdot D - B \cdot N_u)^2 + 4 \cdot A \cdot C \cdot (D^2 + N_u^2) \cdot (A \cdot D - B \cdot N_u)}}{2 \cdot \left[A \cdot D \cdot (C - D) - N_u \cdot (B \cdot C + A \cdot N_u) \right]} = 0 \qquad N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{Y^2 \cdot W^2 \cdot n^2 \cdot (Z^2 + p^2)^2 - 4 \cdot Z \cdot o \cdot (W \cdot Z \cdot n - X \cdot m \cdot p) \cdot \left[Z^2 \cdot (X \cdot Y \cdot m + W \cdot n \cdot o) + X \cdot m \cdot p \cdot (Y \cdot p - Z \cdot o) \right]} - W \cdot Y \cdot Z^2 \cdot n - W \cdot Y \cdot n \cdot p^2}{2 \cdot (X \cdot Y \cdot Z^2 \cdot m + W \cdot Z^2 \cdot n \cdot o + X \cdot Y \cdot m \cdot p^2 - X \cdot Z \cdot m \cdot o \cdot p)} = 0$$

4RST3AB5R3



$N_1 = 2.55445$
$N_2 = 2.13797$
$N_3 = 1.07726$
$N_4 = 1.71415$
$N_5 = 1.40444$
$R = 0.56869$

Unit. $AB := 1$ **Given.** $N_1 := 2.55445$ $N_2 := 2.13797$ $N_3 := 1.07726$ $N_4 := 1.71415$ $N_5 := 1.40444$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

$$GM := \sqrt{JM \cdot (JN - JM)}$$

$$PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP}$$

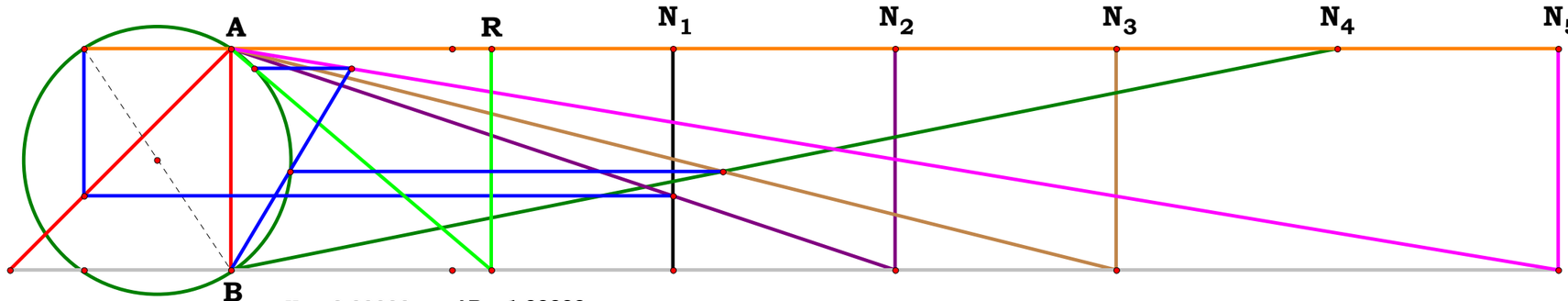
$$AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2}$$

$$EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad AR := \frac{EO \cdot AB}{AO}$$

$AR = 0.568687$

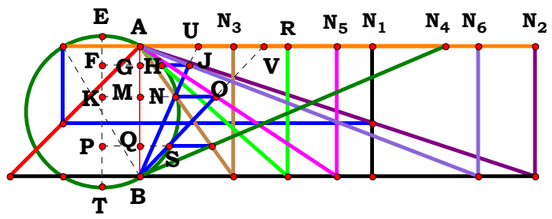


$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 6.00000$
$R = 1.17666$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.44444$
$JN = 1.20185$
$JM = 0.65648$
$GM = 0.59835$
$PG = 0.26502$

$AQ = 0.59629$
$AO = 0.09040$
$JK = 0.19132$
$EK = 0.43970$
$EO = 0.10637$
$R - \frac{EO \cdot AB}{AO} = 0.00000$

4RST3AB5R4



$N_1 = 1.77959$ $N_5 = 1.51098$
$N_2 = 3.02906$ $N_6 = 2.59579$
$N_3 = 0.71888$ $R = 1.13216$
$N_4 = 2.34373$

Unit. $AB := 1$ **Given.** $N_1 := 1.77959$ $N_2 := 3.02906$ $N_3 := .71888$
$N_4 := 2.34373$ $N_5 := 1.51098$ $N_6 := 2.59579$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

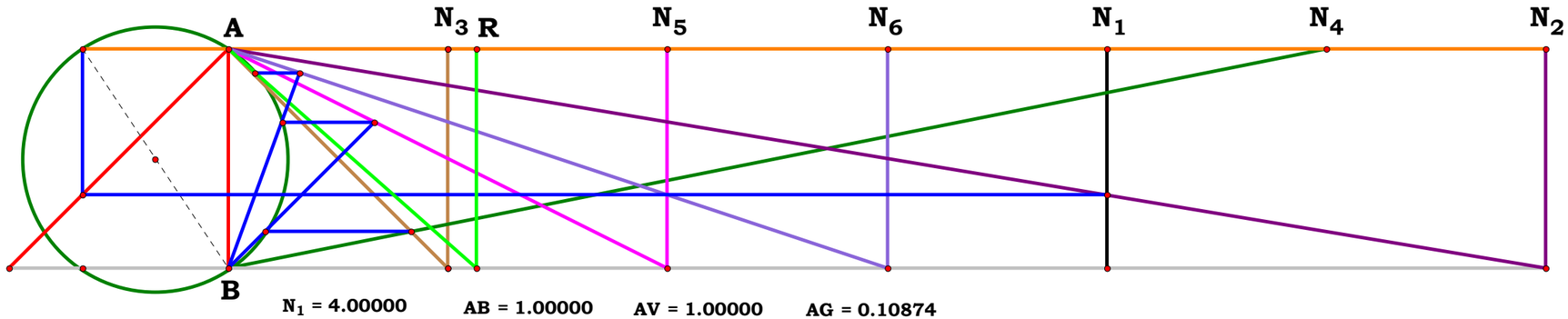
$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{AG}$$

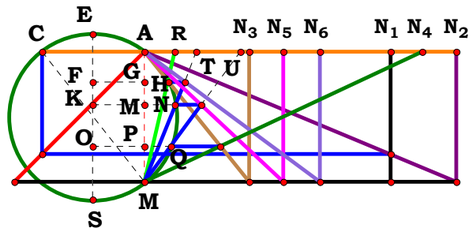
$AR = 1.132161$



$N_1 = 4.00000$ $AB = 1.00000$ $AV = 1.00000$ $AG = 0.10874$
$N_2 = 6.00000$ $AC = 0.66667$ $BM = 0.66667$ $EF = 0.20967$
$N_3 = 1.00000$ $BQ = 0.16667$ $KT = 0.76759$ $FH = 0.45610$
$N_4 = 5.00000$ $ET = 1.20185$ $KN = 0.57735$ $GH = 0.12277$
$N_5 = 2.00000$ $EP = 0.93426$ $MN = 0.24402$ $R - \frac{GH \cdot AB}{AG} = 0.00000$
$N_6 = 3.00000$ $PS = 0.50000$ $AU = 0.36603$
$R = 1.12898$ $QS = 0.16667$ $BG = 0.89126$

Definitions.

4RST3AB5R5



$N_1 = 1.88613$ $N_5 = 1.06544$
$N_2 = 2.38980$ $N_6 = 1.34632$
$N_3 = 0.80606$ $R = 0.23489$
$N_4 = 2.13064$

Unit. $AB := 1$ **Given.** $N_1 := 1.88613$ $N_2 := 2.38980$ $N_3 := .80606$
$N_4 := 2.13064$ $N_5 := 1.06544$ $N_6 := 1.34632$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

$$KN := \sqrt{KS \cdot (ES - KS)}$$

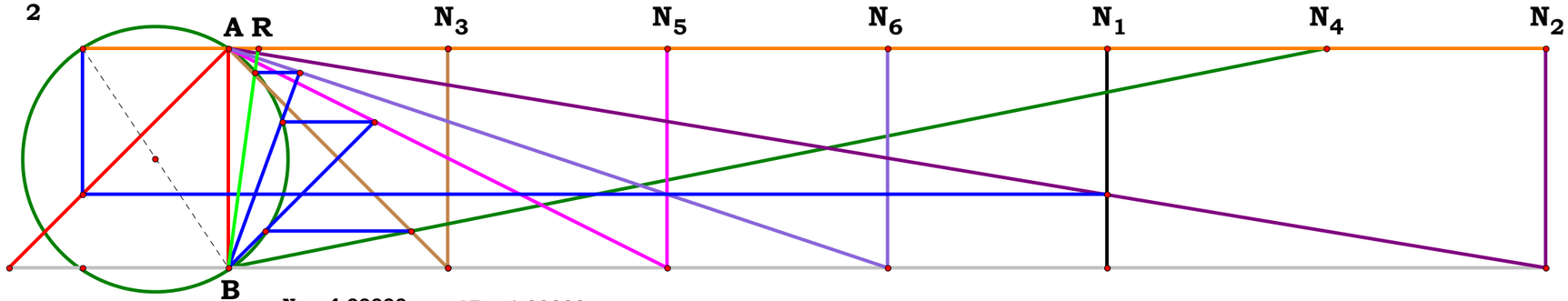
$$MN := KN - \frac{AC}{2}$$

$$AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

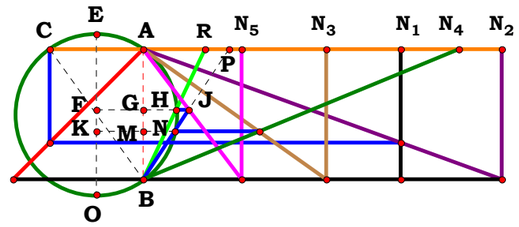
$$AR := \frac{GH \cdot AB}{BG} \qquad AR = 0.234891$$



$N_1 = 4.00000$ $AB = 1.00000$ $AU = 1.00000$ $FS = 0.99218$
$N_2 = 6.00000$ $AC = 0.66667$ $BM = 0.66667$ $FH = 0.45610$
$N_3 = 1.00000$ $BP = 0.16667$ $KS = 0.76759$ $GH = 0.12277$
$N_4 = 5.00000$ $ES = 1.20185$ $KN = 0.57735$ $R - \frac{GH \cdot AB}{BG} = 0.00000$
$N_5 = 2.00000$ $OS = 0.26759$ $MN = 0.24402$
$N_6 = 3.00000$ $OQ = 0.50000$ $AT = 0.36603$
$R = 0.13775$ $PQ = 0.16667$ $BG = 0.89126$

Definitions.

4RST3AB5R6



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 1.40657$
$N_4 = 2.42122$
$N_5 = 0.75549$
R = 0.47844

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 1.40657$
$N_4 := 2.42122$ $N_5 := .75549$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

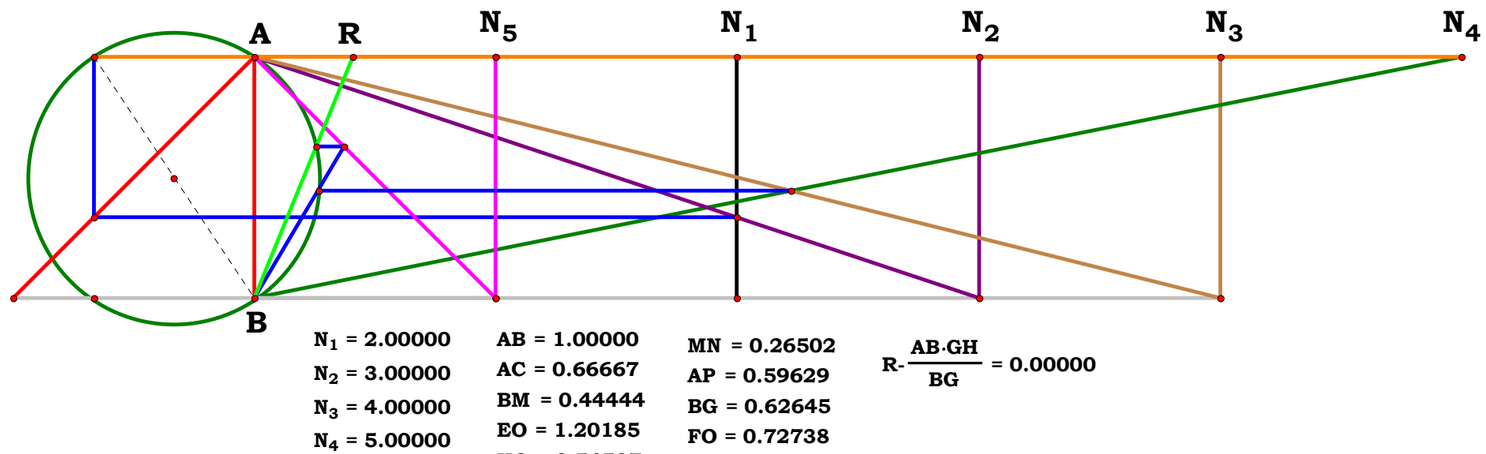
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{BG}$$

AR = 0.47844



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
R = 0.40568

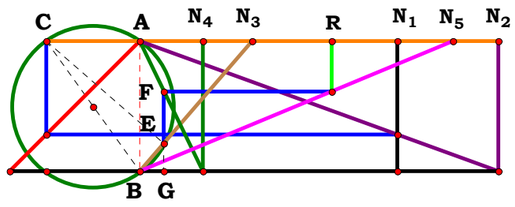
AB = 1.00000
AC = 0.66667
BM = 0.44444
EO = 1.20185
KO = 0.54537
KN = 0.59835

MN = 0.26502
AP = 0.59629
BG = 0.62645
FO = 0.72738
FH = 0.58747
GH = 0.25414

$R - \frac{AB \cdot GH}{BG} = 0.00000$

Definitions.

4RST3AB5R7



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.86417$
$N_4 = 0.48406$
$N_5 = 2.40207$
$R = 1.47045$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .86417$ $N_4 := .48406$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := 2.40207$

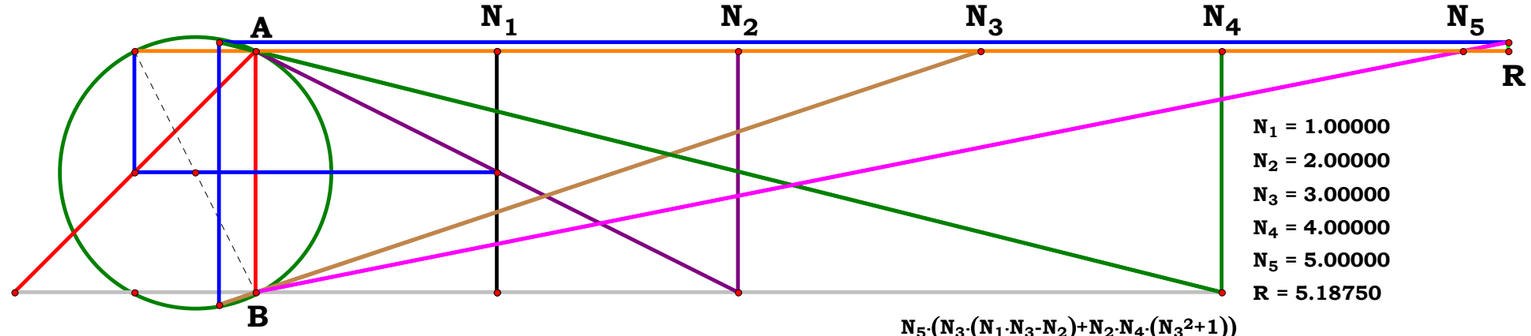
$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad CN_3 := N_3 + AC \qquad BN_3 := \sqrt{N_3^{\,2} + AB^2}$$

$$EN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$$

$$FG := \frac{AB \cdot (N_4 - BG)}{N_4} \qquad R := \frac{N_5 \cdot FG}{AB} \qquad R = 1.470443$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 5.18750$

$$\frac{N_5 \cdot (N_3 \cdot (N_1 \cdot N_3 - N_2) + N_2 \cdot N_4 \cdot (N_3^{\,2}+1))}{N_2 \cdot N_4 \cdot (N_3^{\,2}+1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_5 \cdot \left(N_4 - N_3 + N_3^{\,2} \cdot N_4 + AC \cdot N_3^{\,2}\right)}{N_4 \cdot \left(N_3^{\,2} + 1\right)} = 0$$

$$R - \frac{N_5 \cdot \left[N_3 \cdot \left(N_1 \cdot N_3 - N_2\right) + N_2 \cdot N_4 \cdot \left(N_3^{\,2} + 1\right)\right]}{N_2 \cdot N_4 \cdot \left(N_3^{\,2} + 1\right)} = 0$$

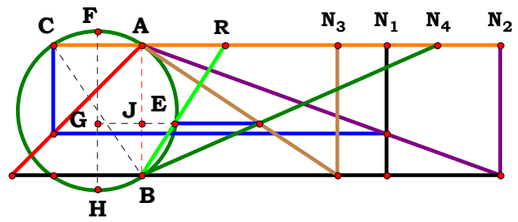
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot C \cdot N_u \cdot (C - D) + N_u^{\,2} \cdot \left(B \cdot D + A \cdot N_u\right)}{A \cdot E \cdot \left(C^2 + N_u^{\,2}\right)} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{X^2 \cdot Z \cdot (W \cdot Y \cdot l + V \cdot m \cdot o) + -W \cdot Z \cdot l \cdot n \cdot (X \cdot o - Y \cdot n)}{W \cdot Y \cdot l \cdot p \cdot X^2 + W \cdot Y \cdot l \cdot p \cdot n^2} = 0$$

4RST3AB5R8



$N_1 = 1.87645$
$N_2 = 2.74817$
$N_3 = 1.50343$
$N_4 = 2.26624$
$R = 0.64069$

Unit. $AB := 1$ Given. $N_1 := 1.87645$ $N_2 := 2.74817$ $N_3 := 1.50343$ $N_4 := 2.26624$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

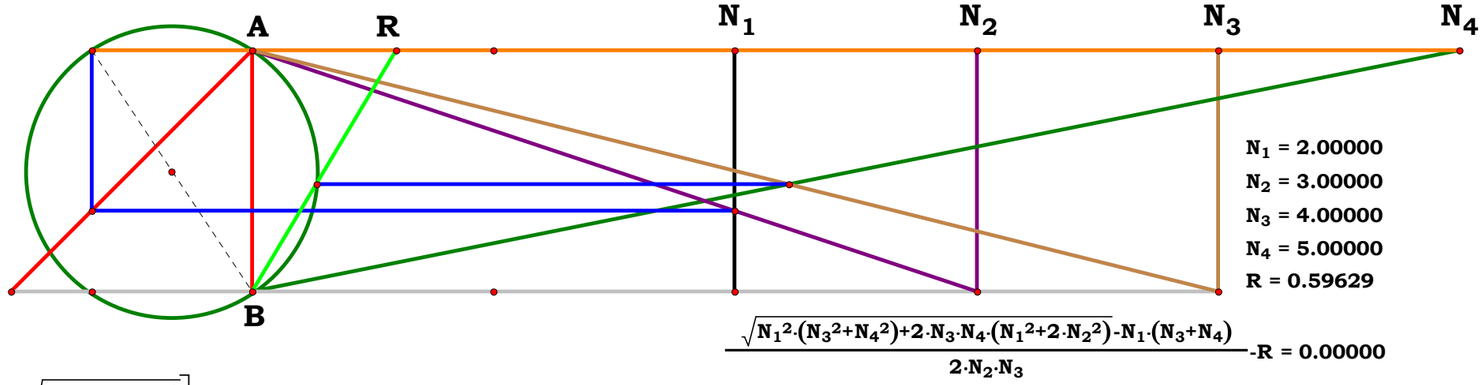
Descriptions.

$AC := \frac{N_1}{N_2}$ $BJ := \frac{AB \cdot N_3}{N_3 + N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $GH := BJ + \frac{FH - AB}{2}$

$GE := \sqrt{GH \cdot (FH - GH)}$ $JE := GE - \frac{AC}{2}$

$R := \frac{JE \cdot AB}{BJ}$ $R = 0.640693$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.59629$

$\frac{\sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)} - N_1 \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot N_3} = 0$$

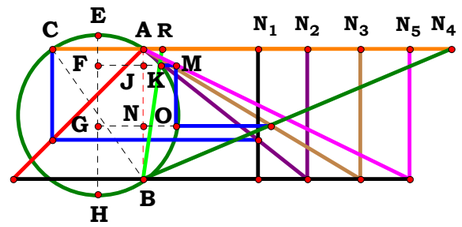
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot D + B^2 \cdot C^2 + 2 \cdot B^2 \cdot C \cdot D + B^2 \cdot D^2} - B \cdot (C + D)}{2 \cdot A \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W^2 \cdot n^2 \cdot (Y^2 \cdot p^2 + Z^2 \cdot o^2) + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (W^2 \cdot n^2 + 2 \cdot X^2 \cdot m^2)} - W \cdot n \cdot (Y \cdot p + Z \cdot o)}{2 \cdot X \cdot Y \cdot m \cdot p} = 0$$

4RST3AB5R9



$N_1 = 0.87881$
$N_2 = 1.25656$
$N_3 = 1.66809$
$N_4 = 2.36310$
$N_5 = 2.04370$
R = 0.14984

Unit. $AB := 1$ **Given.** $N_1 := .87881$ $N_2 := 1.25656$ $N_3 := 1.66809$ $N_4 := 2.36310$ $N_5 := 2.04370$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

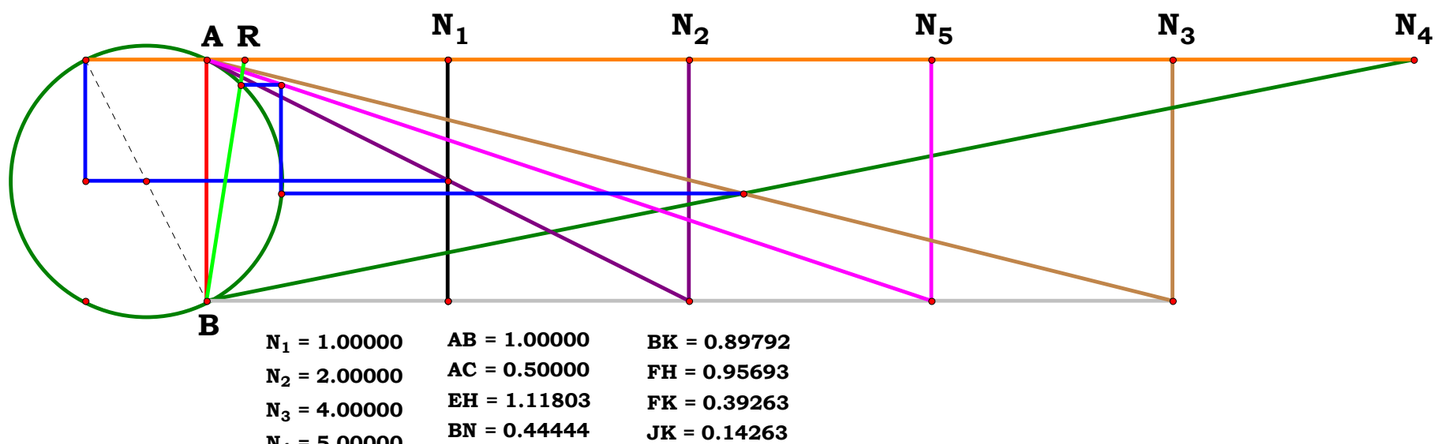
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$AR := \frac{JK \cdot AB}{BK} \qquad AR = 0.149838$$

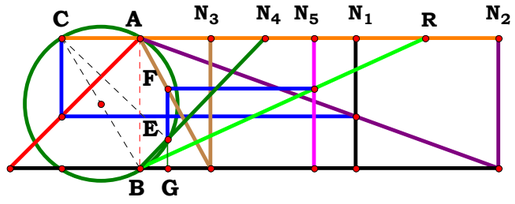


$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 3.00000$
R = 0.15885

AB = 1.00000
AC = 0.50000
EH = 1.11803
BN = 0.44444
GH = 0.50346
GO = 0.55625
NO = 0.30625

BK = 0.89792
FH = 0.95693
FK = 0.39263
JK = 0.14263
$R - \frac{AB \cdot JK}{BK} = 0.00000$

4RST3AB5R10



$N_1 = 1.65368$
$N_2 = 2.74817$
$N_3 = 0.54454$
$N_4 = 0.95866$
$N_5 = 1.33664$
$R = 2.18469$

Unit. $AB := 1$ Given. $N_1 := 1.65368$ $N_2 := 2.74817$ $N_3 := .54454$ $N_4 := .95866$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := 1.33664$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $CN_4 := N_4 + AC$

$BN_4 := \sqrt{N_4^2 + AB^2}$ $EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$

$BG := N_4 \cdot \frac{(BN_4 - EN_4)}{BN_4}$ $FG := AB \cdot \frac{(N_3 - BG)}{N_3}$

$R := \frac{N_5 \cdot AB}{FG}$ $R = 2.184699$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2} = 0$$

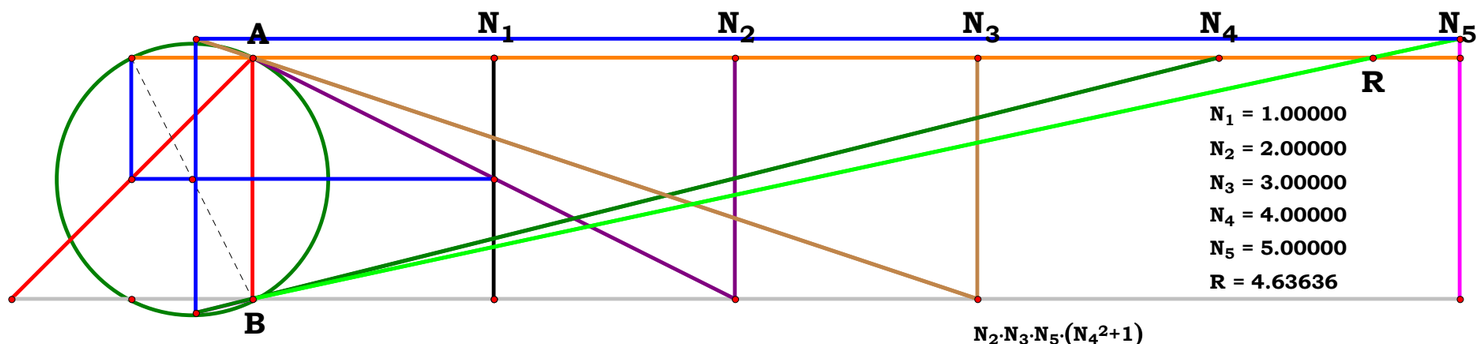
$$R - \frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2 + 1)}{(N_3 \cdot N_4^2 - N_4 + N_3) \cdot N_2 + N_1 \cdot N_4^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (D^2 + N_u^2)}{E \cdot [A \cdot D \cdot (D - C) + N_u \cdot (B \cdot C + A \cdot N_u)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

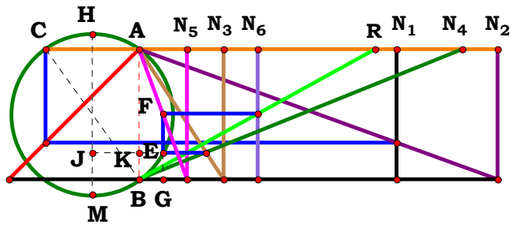
$$R - \frac{W \cdot X \cdot Z \cdot l \cdot (Y^2 + o^2)}{p \cdot [Y^2 \cdot (W \cdot X \cdot l + V \cdot m \cdot n) + W \cdot l \cdot o \cdot (X \cdot o - Y \cdot n)]} = 0$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 4.63636$

$$\frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_2 \cdot ((N_3 \cdot N_4^2 - N_4) + N_3) + N_1 \cdot N_4^2} - R = 0.00000$$

4RST3AB5R11



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.65108$
$N_4 = 2.47933$
$N_5 = 0.36806$
$N_6 = 0.91046$
$R = 1.80932$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .65108$

$N_4 := 2.47933$ $N_5 := .36806$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EG := \frac{N_3 \cdot AB}{N_3 + N_4}$ $HM := \sqrt{AB^2 + AC^2}$

$JM := EG + \frac{HM - AB}{2}$

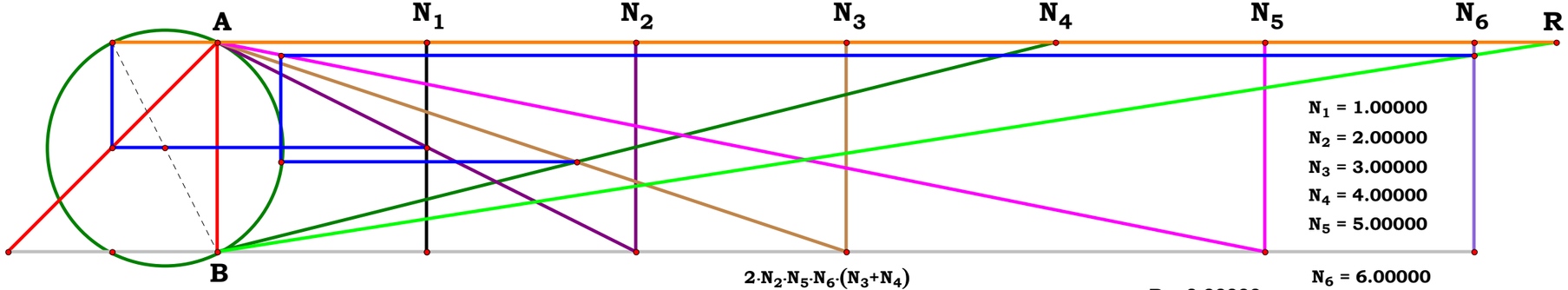
$JE := \sqrt{JM \cdot (HM - JM)}$

$BG := JE - \frac{AC}{2}$

$FG := \frac{AB \cdot (N_5 - BG)}{N_5}$

$R := \frac{N_6 \cdot AB}{FG}$

$R = 1.809309$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$N_6 = 6.00000$
$R = 6.38901$

$$\frac{2 \cdot N_2 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_1 \cdot (N_3 + N_4) + 2 \cdot N_2 \cdot N_5 \cdot (N_3 + N_4)) - \sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{2 \cdot N_2 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot (N_1 + 2 \cdot N_2 \cdot N_5) - \sqrt{N_1^2 \cdot (N_3^2 + N_4^2) + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2)}} = 0$$

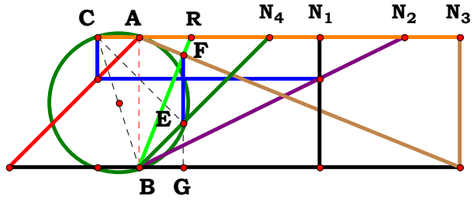
$$R - \frac{2 \cdot A \cdot N_u^2 \cdot (C + D)}{F \cdot \left[B \cdot E \cdot (C + D) + 2 \cdot A \cdot N_u \cdot (C + D) - E \cdot \sqrt{B^2 \cdot C^2 + B^2 \cdot D^2 + 2 \cdot C \cdot D \cdot (2 \cdot A^2 + B^2)} \right]} = 0$$

$$R - \frac{2 \cdot V \cdot Y \cdot Z \cdot k \cdot (W \cdot n + X \cdot m)}{p \cdot \left[(W \cdot n + X \cdot m) \cdot (2 \cdot V \cdot Y \cdot k + U \cdot l \cdot o) - o \cdot \sqrt{U^2 \cdot l^2 \cdot (W^2 \cdot n^2 + X^2 \cdot m^2) + 2 \cdot W \cdot X \cdot m \cdot n \cdot (U^2 \cdot l^2 + 2 \cdot V^2 \cdot k^2)} \right]} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

4RST3AB6R0



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 2.46232$
$N_4 = 0.99741$
$R = 0.39539$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 2.46232$ $N_4 := .99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

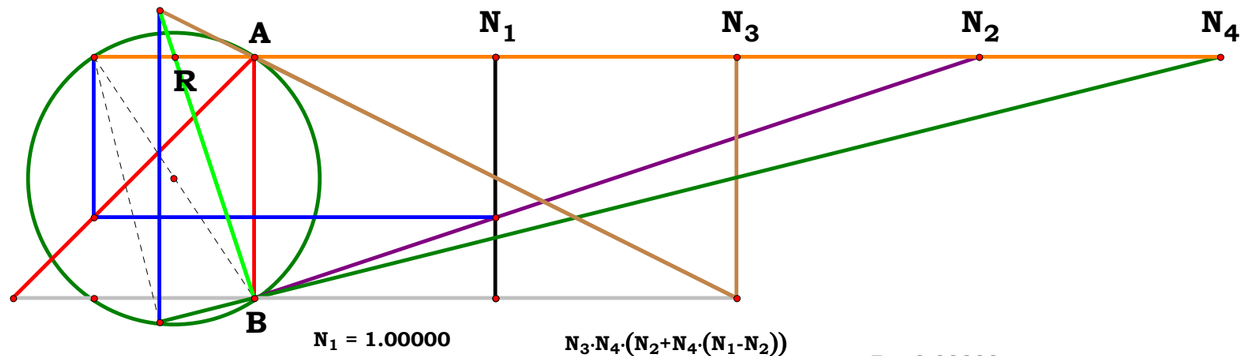
$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_4 := N_4 + AC$$

$$BN_4 := \sqrt{N_4^2 + AB^2} \qquad EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$$

$$BE := BN_4 - EN_4 \qquad BG := \frac{N_4 \cdot BE}{BN_4}$$

$$FG := \frac{AB \cdot (N_3 - BG)}{N_3} \qquad R := \frac{BG \cdot AB}{FG}$$

$R = 0.39539$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = -0.32787$

$$\frac{N_3 \cdot N_4 \cdot (N_2 + N_4 \cdot (N_1 - N_2))}{N_4 \cdot (N_2 \cdot N_4 - N_1 \cdot N_4 - N_2) + N_2 \cdot N_3 \cdot (N_4^2 + 1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AC \cdot N_4 - 1)}{N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot [N_2 + N_4 \cdot (N_1 - N_2)]}{N_4 \cdot (N_2 \cdot N_4 - N_1 \cdot N_4 - N_2) + N_2 \cdot N_3 \cdot (N_4^2 + 1)} = 0$$

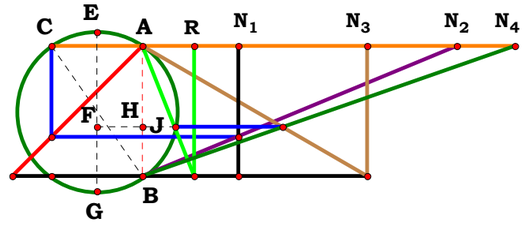
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{N_u \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)}{A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (W \cdot Z \cdot n - X \cdot Z \cdot m + X \cdot m \cdot p)}{X \cdot m \cdot (Y \cdot Z^2 + Y \cdot p^2 + Z^2 \cdot o - Z \cdot o \cdot p) - W \cdot Z^2 \cdot n \cdot o} = 0$$

4RST3AB6R1



$N_1 = 0.73353$
$N_2 = 2.40917$
$N_3 = 1.72621$
$N_4 = 2.85708$
$R = 0.39889$

Unit. $AB := 1$ Given. $N_1 := .73353$ $N_2 := 2.40917$ $N_3 := 1.72621$ $N_4 := 2.85708$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

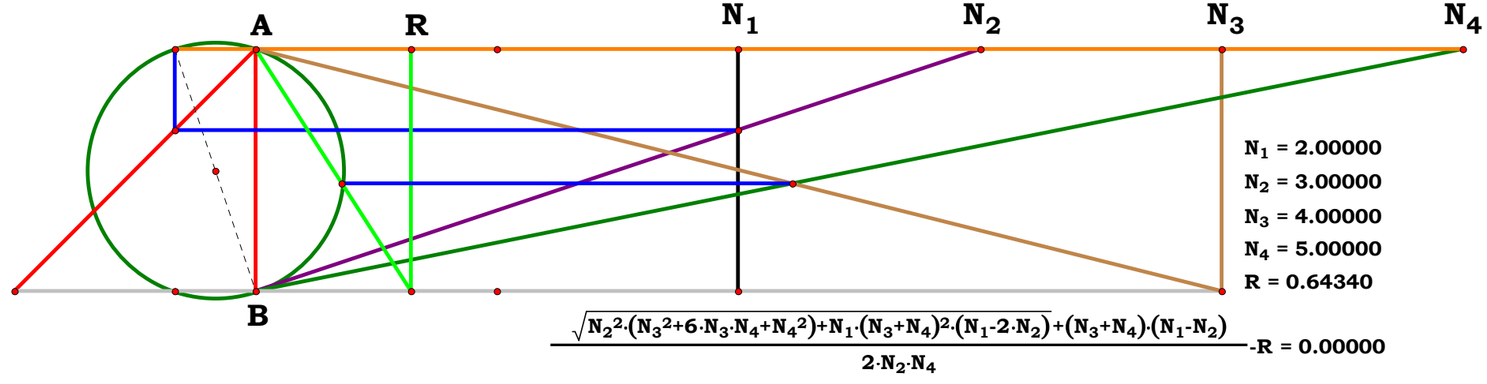
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad AH := \frac{AB \cdot N_4}{N_4 + N_3}$$

$$EG := \sqrt{AB^2 + AC^2} \qquad EF := AH + \frac{(EG - AB)}{2}$$

$$FJ := \sqrt{EF \cdot (EG - EF)} \qquad HJ := FJ - \frac{AC}{2}$$

$$R := \frac{HJ \cdot AB}{AH} \qquad R = 0.398896$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.64340$

$$\frac{\sqrt{N_2^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_1 \cdot (N_3 + N_4)^2 \cdot (N_1 - 2 \cdot N_2)} + (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_4 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_1 \cdot (N_3 + N_4)^2 \cdot (N_1 - 2 \cdot N_2)} + (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_4} = 0$$

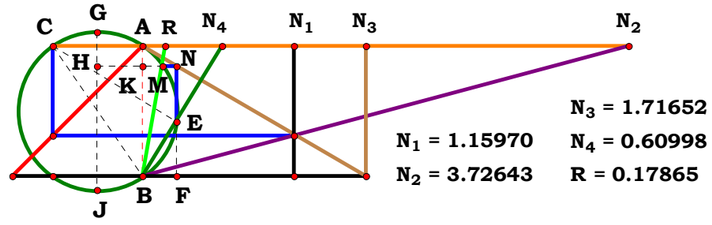
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{\sqrt{(C^2 + D^2) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot (3 \cdot A^2 - 2 \cdot A \cdot B + B^2)} - (C + D) \cdot (A - B)}{2 \cdot A \cdot C} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{(Y^2 \cdot p^2 + Z^2 \cdot o^2) \cdot (W \cdot n - X \cdot m)^2 + 2 \cdot Y \cdot Z \cdot o \cdot p \cdot (W^2 \cdot n^2 - 2 \cdot W \cdot X \cdot m \cdot n + 3 \cdot X^2 \cdot m^2)} + (Y \cdot p + Z \cdot o) \cdot (W \cdot n - X \cdot m)}{2 \cdot X \cdot Z \cdot m \cdot o} = 0$$

4RST3AB6R2



Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 3.72643$ $N_3 := 1.71652$ $N_4 := .60998$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

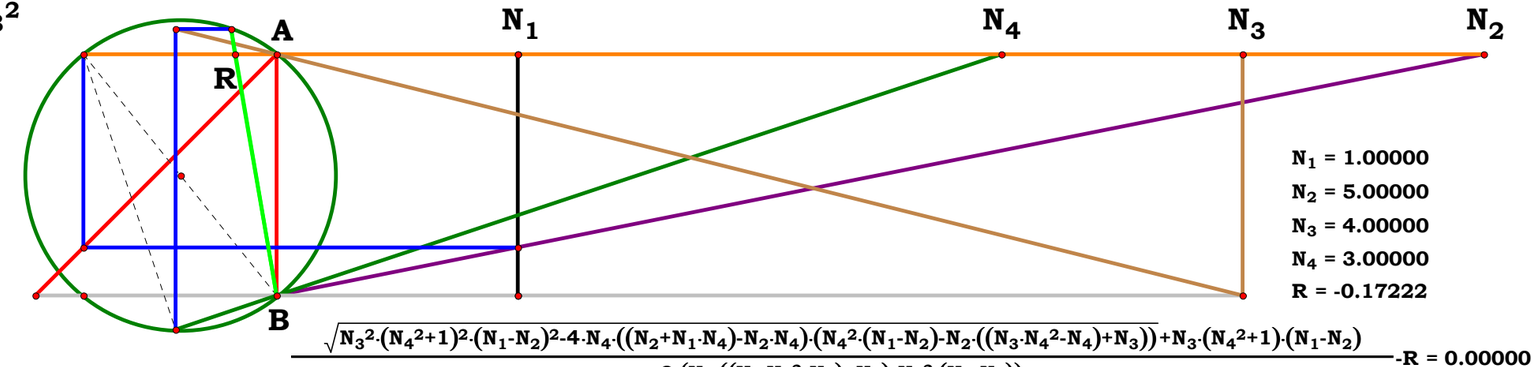
$AC := \frac{N_2 - N_1}{N_2}$ $CN_4 := N_4 + AC$ $BN_4 := \sqrt{N_4^2 + AB^2}$

$EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$ $BF := \frac{N_4 \cdot (BN_4 - EN_4)}{BN_4}$

$AK := \frac{AB \cdot BF}{N_3}$ $GJ := \sqrt{AB^2 + AC^2}$

$GH := AK + \frac{GJ - AB}{2}$ $HM := \sqrt{GH \cdot (GJ - GH)}$

$KM := HM - \frac{AC}{2}$ $R := \frac{KM \cdot AB}{AB - AK}$ $R = 0.178653$



$$\frac{\sqrt{N_3^2 \cdot (N_4^2+1)^2 \cdot (N_1-N_2)^2 - 4 \cdot N_4 \cdot ((N_2+N_1 \cdot N_4)-N_2 \cdot N_4) \cdot (N_4^2 \cdot (N_1-N_2) - N_2 \cdot ((N_3 \cdot N_4^2 - N_4)+N_3))} + N_3 \cdot (N_4^2+1) \cdot (N_1-N_2)}{2 \cdot (N_2 \cdot ((N_3 \cdot N_4^2 - N_4)+N_3) - N_4^2 \cdot (N_1-N_2))} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_4^2+1) \cdot \left[AC \cdot \sqrt{\left[N_3 \cdot (N_4^2+1) \right]^2} - \sqrt{AC \cdot N_3 \cdot N_4^2 \cdot (2 \cdot AC \cdot N_3 - 4 \cdot N_4^2 + AC \cdot N_3 \cdot N_4^2 - 4) + AC^2 \cdot N_3^2 - 4 \cdot AC \cdot N_4^3 \cdot (AC \cdot N_4 - 2) + 4 \cdot N_3 \cdot N_4 \cdot (N_4^2+1) - 4 \cdot N_4^2} \right]}{2 \cdot \sqrt{\left[N_3 \cdot (N_4^2+1) \right]^2} \cdot (N_4 - N_3 - N_3 \cdot N_4^2 - AC \cdot N_4^2)} = 0$$

$$R - \frac{\sqrt{N_3^2 \cdot (N_4^2+1)^2 \cdot (N_1-N_2)^2 - 4 \cdot N_4^2 \cdot (N_2+N_1 \cdot N_4 - N_2 \cdot N_4)^2 + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_4^2+1) \cdot (N_2+N_1 \cdot N_4 - N_2 \cdot N_4)} + N_3 \cdot (N_4^2+1) \cdot (N_1-N_2)}{2 \cdot (N_2 \cdot N_4^2 - N_1 \cdot N_4^2 + N_2 \cdot N_3 - N_2 \cdot N_4 + N_2 \cdot N_3 \cdot N_4^2)} = 0$$

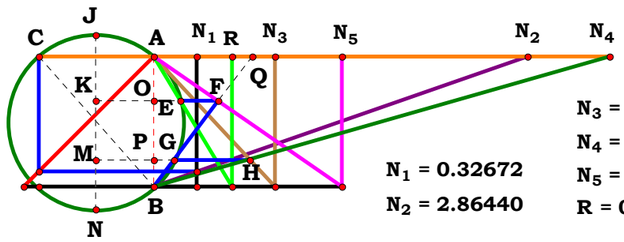
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(D^2 + N_u^2) \cdot (A-B) - \sqrt{(D^2+N_u^2)^2 \cdot (A-B)^2 - 4 \cdot C^2 \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)^2 + 4 \cdot A \cdot C \cdot (D^2+N_u^2) \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)}}{2 \cdot (A \cdot C \cdot D - A \cdot N_u^2 - A \cdot D^2 - A \cdot C \cdot N_u + B \cdot C \cdot N_u)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot (Z^2+p^2)^2 \cdot (W \cdot n - X \cdot m)^2 + 4 \cdot Y \cdot X \cdot Z \cdot m \cdot o \cdot (Z^2+p^2) \cdot (W \cdot Z \cdot n - X \cdot Z \cdot m + X \cdot m \cdot p) - 4 \cdot Z^2 \cdot o^2 \cdot (W \cdot Z \cdot n - X \cdot Z \cdot m + X \cdot m \cdot p)^2} + Y \cdot (Z^2+p^2) \cdot (W \cdot n - X \cdot m)}{2 \cdot (X \cdot Y \cdot Z^2 \cdot m - W \cdot Z^2 \cdot n \cdot o + X \cdot Y \cdot m \cdot p^2 + X \cdot Z^2 \cdot m \cdot o - X \cdot Z \cdot m \cdot o \cdot p)} = 0$$

4RST3AB6R3



$N_1 = 0.32672$
$N_2 = 2.86440$
$N_3 = 0.93197$
$N_4 = 3.49634$
$N_5 = 1.44318$
$R = 0.60084$

Unit. $AB := 1$ **Given.** $N_1 := .32672$ $N_2 := 2.86440$ $N_3 := .93197$ $N_4 := 3.49634$ $N_5 := 1.44318$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

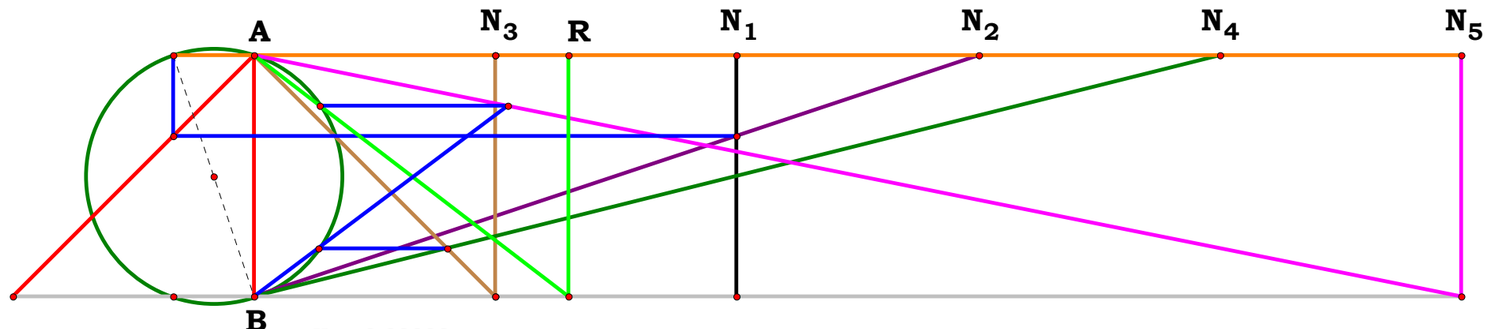
$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad AR := \frac{EO \cdot AB}{AO}$$

$AR = 0.600839$

Definitions.



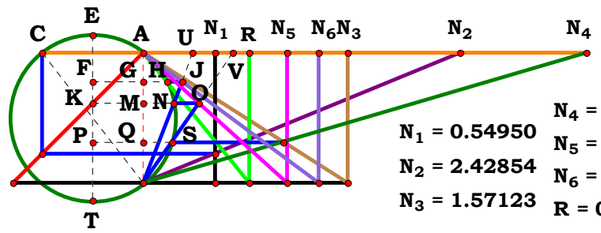
$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 1.30040$

$AB = 1.00000$
$AC = 0.33333$
$BP = 0.20000$
$JN = 1.05409$
$JM = 0.82705$
$GM = 0.43333$

$PG = 0.26667$
$AQ = 1.33333$
$AO = 0.21053$
$JK = 0.23757$
$EK = 0.44043$
$EO = 0.27377$

$AB \cdot EO$
$R - \frac{AB \cdot EO}{AO} = 0.00000$

4RST3AB6R4



$N_1 = 0.54950$ $N_2 = 2.42854$ $N_3 = 1.57123$ $N_4 = 3.39689$ $N_5 = 1.10418$ $N_6 = 1.34632$ $R = 0.81693$

Unit. $AB := 1$ **Given.** $N_1 := .54950$ $N_2 := 2.42854$ $N_3 := 1.57123$ $N_4 := 3.39689$ $N_5 := 1.10418$ $N_6 := 1.34632$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

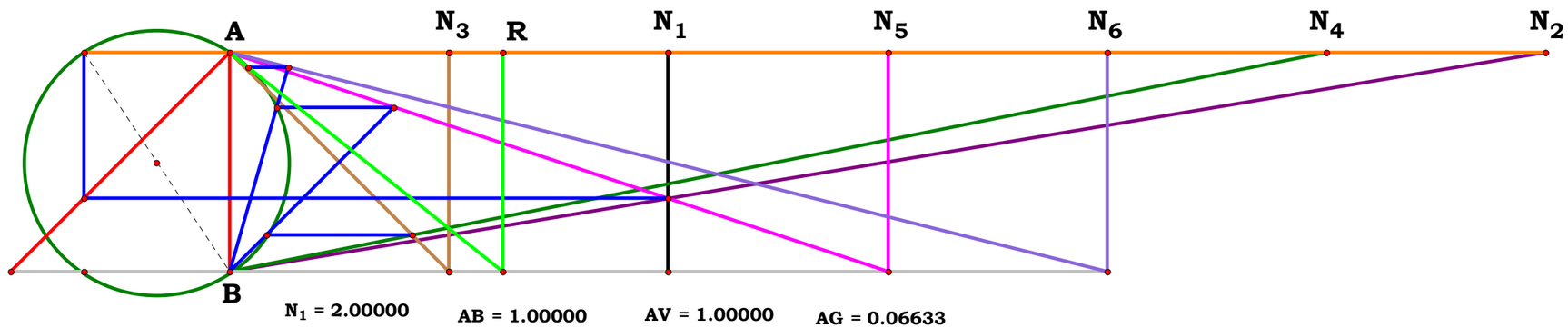
$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2}$$

$$FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad AR := \frac{GH \cdot AB}{AG}$$

$AR = 0.816934$



$N_1 = 2.00000$ $N_2 = 6.00000$ $N_3 = 1.00000$ $N_4 = 5.00000$ $N_5 = 3.00000$ $N_6 = 4.00000$ $R = 1.24604$

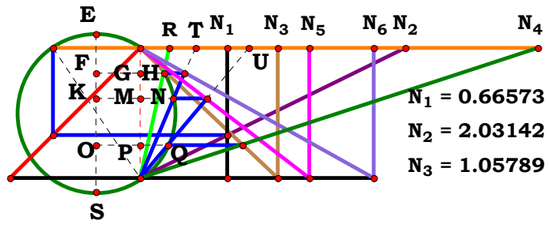
$AB = 1.00000$ $AC = 0.66667$ $BQ = 0.16667$ $ET = 1.20185$ $EP = 0.93426$ $PS = 0.50000$ $QS = 0.16667$

$AV = 1.00000$ $BM = 0.75000$ $KT = 0.85093$ $KN = 0.54645$ $MN = 0.21312$ $AU = 0.28416$ $BG = 0.93367$

$AG = 0.06633$ $EF = 0.16725$ $FH = 0.41598$ $GH = 0.08265$ $R - \frac{AB \cdot GH}{AG} = 0.00000$

Definitions.

4RST3AB6R5



$N_4 = 3.05079$
$N_1 = 0.66573$
$N_2 = 2.03142$
$N_3 = 1.05789$
$N_5 = 1.29790$
$N_6 = 1.79187$
$R = 0.22341$

Unit. $AB := 1$ **Given.** $N_1 := .66573$ $N_2 := 2.03142$ $N_3 := 1.05789$ $N_4 := 3.05079$ $N_5 := 1.29790$ $N_6 := 1.79187$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP} \qquad BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

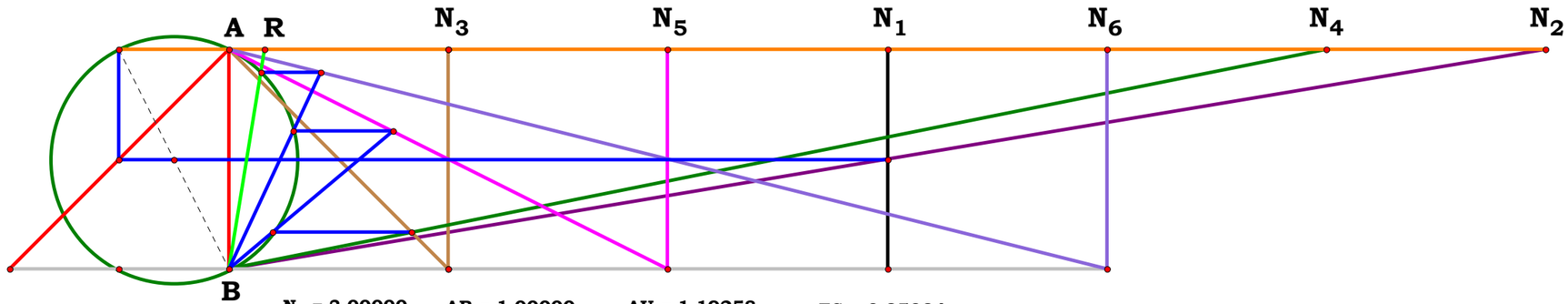
$$KN := \sqrt{KS \cdot (ES - KS)}$$

$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.223407$$



$N_1 = 3.00000$
$N_2 = 6.00000$
$N_3 = 1.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$N_6 = 4.00000$
$R = 0.16288$

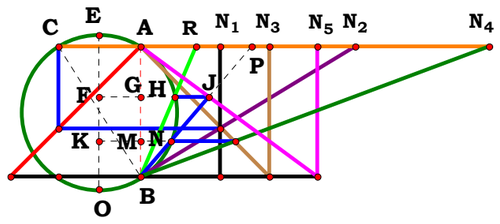
$AB = 1.00000$
$AC = 0.50000$
$BP = 0.16667$
$ES = 1.11803$
$OS = 0.22568$
$OQ = 0.44876$
$PQ = 0.19876$

$AU = 1.19258$
$BM = 0.62645$
$KS = 0.68547$
$KN = 0.54453$
$MN = 0.29453$
$AT = 0.47015$
$BG = 0.89482$

$FS = 0.95384$
$FH = 0.39574$
$GH = 0.14574$
$R - \frac{AB \cdot GH}{BG} = 0.00000$

Definitions.

4RST3AB6R6



$N_1 = 0.60761$
$N_2 = 1.64399$
$N_3 = 0.99009$
$N_4 = 2.67305$
$N_5 = 1.35601$
R = 0.43013

Unit. $AB := 1$ **Given.** $N_1 := .60761$ $N_2 := 1.64399$ $N_3 := .99009$ $N_4 := 2.67305$ $N_5 := 1.35601$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

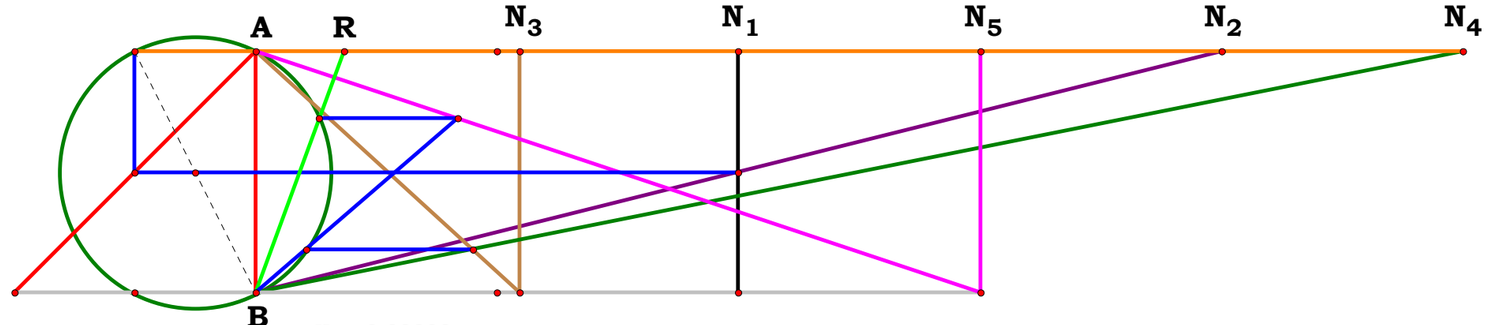
$$FO := BG + \frac{EO - AB}{2}$$

$$FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG}$$

$R = 0.430132$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 1.09412$
$N_4 = 5.00000$
$N_5 = 3.00000$
R = 0.36503

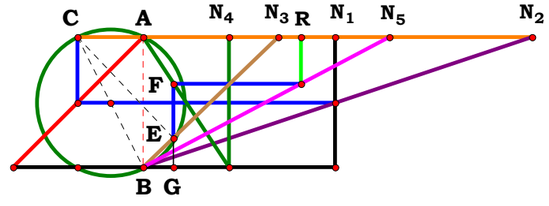
AB = 1.00000
AC = 0.50000
BM = 0.17954
EO = 1.11803
KO = 0.23855
KN = 0.45804

MN = 0.20804
AP = 1.15878
BG = 0.72137
FO = 0.78038
FH = 0.51332
GH = 0.26332

AB·GH
$R - \frac{AB \cdot GH}{BG} = 0.00000$

Definitions.

4RST3AB6R7



$N_1 = 1.46965$
$N_2 = 2.98063$
$N_3 = 1.03851$
$N_4 = 0.65840$
$N_5 = 1.88873$
$R = 1.21000$

Unit. $AB := 1$ Given. $N_1 := 1.46965$ $N_2 := 2.98063$ $N_3 := 1.03851$ $N_4 := .65840$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := 1.88873$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

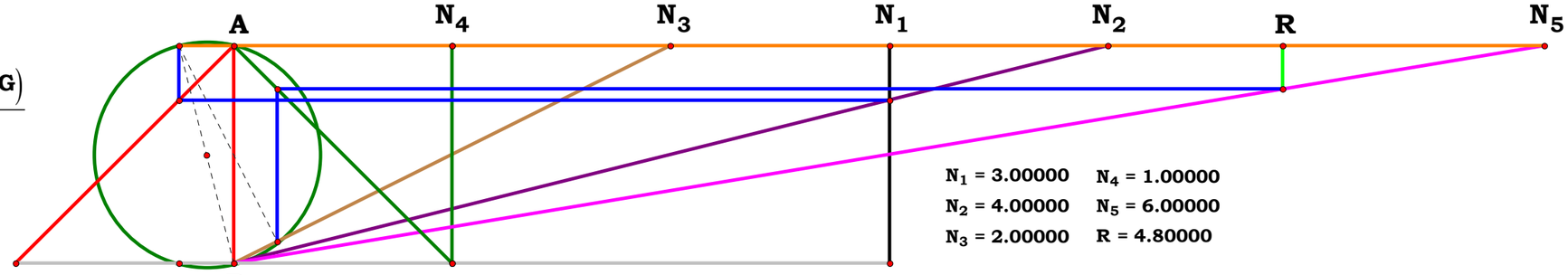
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_3 := N_3 + AC$$

$$BN_3 := \sqrt{N_3^{\,2} + AB^2} \qquad EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3} \qquad FG := \frac{AB \cdot (N_4 - BG)}{N_4}$$

$$R := \frac{N_5 \cdot FG}{AB} \qquad R = 1.209993$$



$N_1 = 3.00000$ $N_4 = 1.00000$
$N_2 = 4.00000$ $N_5 = 6.00000$
$N_3 = 2.00000$ $R = 4.80000$

Definitions.

B

$$R - \frac{N_5 \cdot \left(N_4 - N_3 + N_3^{\,2} \cdot N_4 + AC \cdot N_3^{\,2}\right)}{N_4 \cdot \left(N_3^{\,2} + 1\right)} = 0$$

$$\frac{N_2 \cdot N_5 \cdot ((N_4 - N_3) + N_3^{\,2} \cdot N_4 + N_3^{\,2}) - N_1 \cdot N_3^{\,2} \cdot N_5}{N_2 \cdot N_4 \cdot (N_3^{\,2} + 1)} - R = 0.00000$$

$$R - \frac{N_2 \cdot N_5 \cdot \left(N_4 - N_3 + N_3^{\,2} \cdot N_4 + N_3^{\,2}\right) - N_1 \cdot N_3^{\,2} \cdot N_5}{N_2 \cdot N_4 \cdot \left(N_3^{\,2} + 1\right)} = 0$$

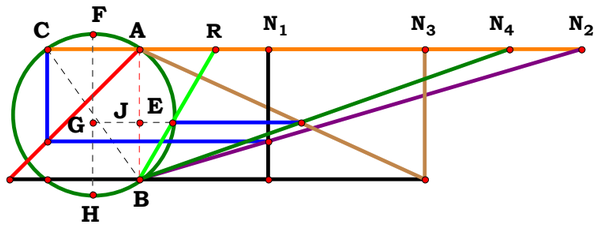
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot C \cdot N_u \cdot (C - D) + N_u \cdot \left[N_u \cdot \left[D \cdot (A - B) + A \cdot N_u\right]\right]}{A \cdot E \cdot \left(C^2 + N_u^{\,2}\right)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right) - X \cdot Z \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)}{W \cdot Y \cdot l \cdot p \cdot \left(X^2 + n^2\right)} = 0$$

4RST3AB6R8



$N_1 = 0.98536$
$N_2 = 3.38743$
$N_3 = 2.19112$
$N_4 = 2.83771$
$R = 0.58528$

Unit. $AB := 1$ Given. $N_1 := .98536$ $N_2 := 3.38743$ $N_3 := 2.19112$ $N_4 := 2.83771$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

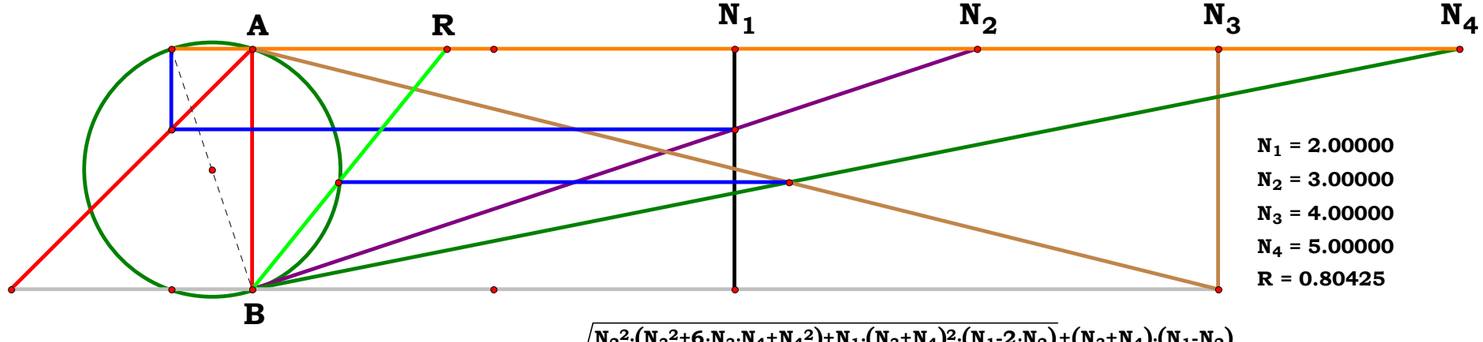
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BJ := \frac{AB \cdot N_3}{N_3 + N_4}$

$FH := \sqrt{AB^2 + AC^2}$ $GH := BJ + \frac{FH - AB}{2}$

$GE := \sqrt{GH \cdot (FH - GH)}$ $JE := GE - \frac{AC}{2}$

$R := \frac{JE \cdot AB}{BJ}$ $R = 0.585284$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.80425$

$\frac{\sqrt{N_2^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_1 \cdot (N_3 + N_4)^2 \cdot (N_1 - 2 \cdot N_2)} + (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{\left[\sqrt{AC^2 \cdot N_3^2 + 2 \cdot AC^2 \cdot N_3 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_3 \cdot N_4} - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)}{2 \cdot N_3 \cdot \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot (N_3^2 + 6 \cdot N_3 \cdot N_4 + N_4^2) + N_1 \cdot (N_3 + N_4)^2 \cdot (N_1 - 2 \cdot N_2)} + (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot N_3} = 0$$

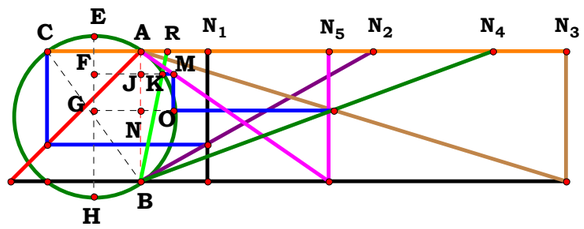
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{(C^2 + D^2) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot (3 \cdot A^2 - 2 \cdot A \cdot B + B^2)} - A \cdot (C + D) + B \cdot (C + D)}{2 \cdot A \cdot D} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{W \cdot n \cdot (Y + N_4 \cdot o)^2 \cdot (W \cdot n - 2 \cdot X \cdot m) + X^2 \cdot m^2 \cdot (N_4^2 \cdot o^2 + 6 \cdot N_4 \cdot Y \cdot o + Y^2)} + (Y + N_4 \cdot o) \cdot (W \cdot n - X \cdot m)}{2 \cdot X \cdot Y \cdot m} = 0$$

4RST3AB6R9



N_1 = 0.51075
N_2 = 1.77959
N_3 = 3.26624
N_4 = 2.70210
N_5 = 1.44318
R = 0.20164

Unit. $AB := 1$ **Given.** $N_1 := .51075$ $N_2 := 1.77959$ $N_3 := 3.26624$ $N_4 := 2.70210$ $N_5 := 1.44318$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

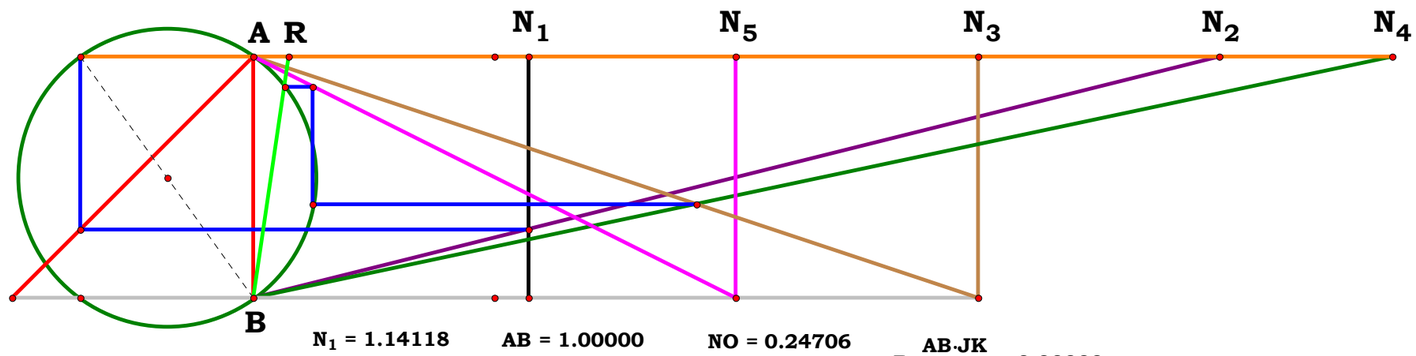
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.201637$$



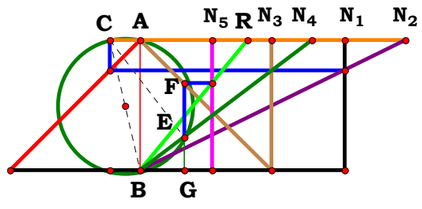
N_1 = 1.14118
N_2 = 4.00000
N_3 = 3.00000
N_4 = 4.71764
N_5 = 2.00000
R = 0.14652

AB = 1.00000
AC = 0.71470
EH = 1.22915
BN = 0.38872
GH = 0.50329
GO = 0.60441

NO = 0.24706
BK = 0.87647
FH = 0.99104
FK = 0.48577
JK = 0.12842

$R - \frac{AB \cdot JK}{BK} = 0.00000$

4RST3AB6R10



$N_1 = 1.56650$
$N_2 = 2.03142$
$N_3 = 1.00946$
$N_4 = 1.31704$
$N_5 = 0.55209$
$R = 0.82809$

Unit. $AB := 1$ Given. $N_1 := 1.56650$ $N_2 := 2.03142$ $N_3 := 1.00946$ $N_4 := 1.31740$ $N_5 := .55209$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

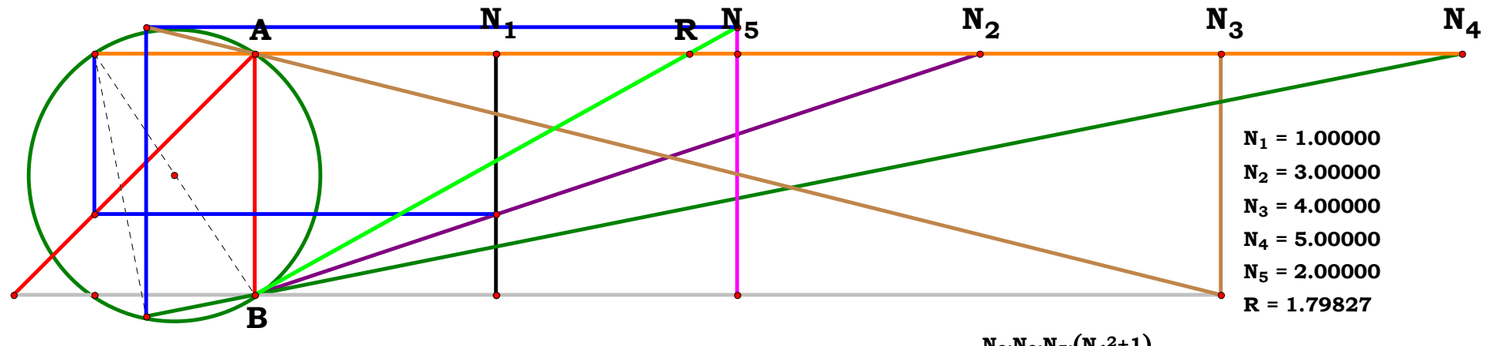
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_4 := N_4 + AC$$

$$BN_4 := \sqrt{N_4^2 + AB^2} \qquad EN_4 := \frac{N_4 \cdot CN_4}{BN_4}$$

$$BG := N_4 \cdot \frac{(BN_4 - EN_4)}{BN_4} \qquad FG := AB \cdot \frac{(N_3 - BG)}{N_3}$$

$$R := \frac{N_5 \cdot AB}{FG} \qquad R = 0.82801$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 1.79827$

$$\frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2+1)}{N_4^2 \cdot ((N_2-N_1)+N_2 \cdot N_3)+N_2 \cdot (N_3-N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot (N_4^2 + 1)}{N_3 - N_4 + N_3 \cdot N_4^2 + AC \cdot N_4^2} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot N_5 \cdot (N_4^2 + 1)}{(N_2 - N_1 + N_2 \cdot N_3) \cdot N_4^2 + N_2 \cdot (N_3 - N_4)} = 0$$

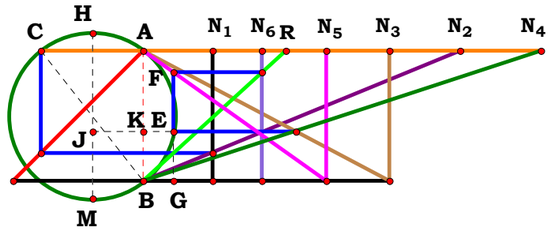
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot N_u \cdot (D^2 + N_u^2)}{E \cdot (A \cdot D^2 + A \cdot N_u^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot X \cdot Z \cdot l \cdot (Y^2 + o^2)}{p \cdot [W \cdot l \cdot (X \cdot Y^2 + X \cdot o^2 + Y^2 \cdot n - Y \cdot n \cdot o) - V \cdot Y^2 \cdot m \cdot n]} = 0$$

4RST3AB6R11



$N_1 = 0.53013$
$N_2 = 2.42854$
$N_3 = 1.89086$
$N_4 = 3.05079$
$N_5 = 1.40444$
$N_6 = 0.91046$
$R = 1.09141$

Unit. $AB := 1$ Given. $N_1 := .53013$ $N_2 := 2.42854$ $N_3 := 1.89086$ $N_4 := 3.05079$ $N_5 := 1.40444$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

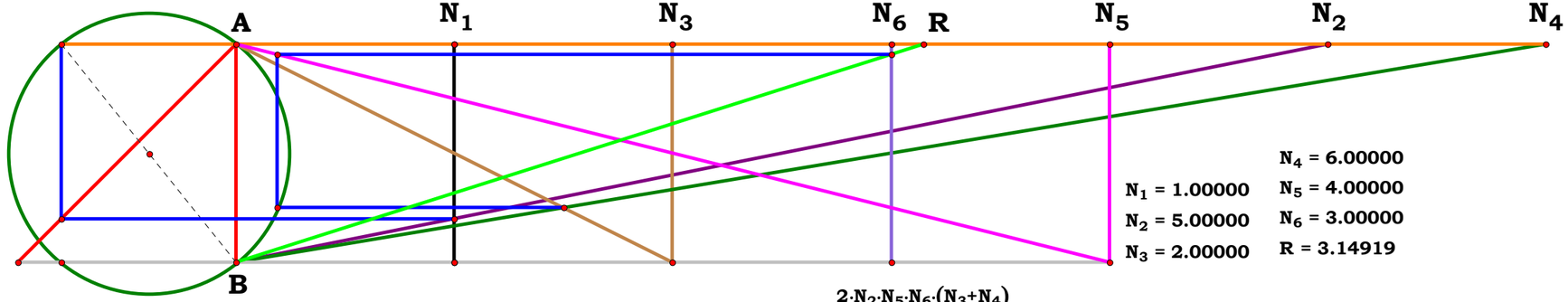
$AC := \frac{N_2 - N_1}{N_2}$ $EG := \frac{N_3 \cdot AB}{N_3 + N_4}$ $HM := \sqrt{AB^2 + AC^2}$

$JM := EG + \frac{HM - AB}{2}$ $JE := \sqrt{JM \cdot (HM - JM)}$

$BG := JE - \frac{AC}{2}$ $FG := \frac{AB \cdot (N_5 - BG)}{N_5}$

$R := \frac{N_6 \cdot AB}{FG}$ $R = 1.091401$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 1.00000$
$N_2 = 5.00000$
$N_3 = 2.00000$
$N_4 = 6.00000$
$N_5 = 4.00000$
$N_6 = 3.00000$
$R = 3.14919$

$$\frac{2 \cdot N_2 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot ((N_2 - N_1) + 2 \cdot N_2 \cdot N_5) - \sqrt{(N_3^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot ((N_1^2 - 2 \cdot N_1 \cdot N_2) + 3 \cdot N_2^2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_5 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2} \cdot (AC + 2 \cdot N_5) - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4}} = 0$$

$$R - \frac{2 \cdot N_2 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)}{(N_3 + N_4) \cdot (N_2 - N_1 + 2 \cdot N_2 \cdot N_5) - \sqrt{(N_3^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot (N_1^2 - 2 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)}} = 0$$

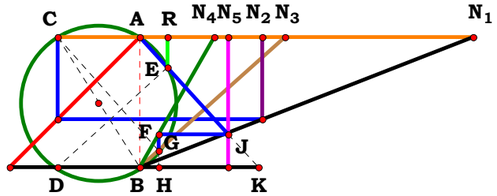
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot A \cdot N_u^2 \cdot (C + D)}{2 \cdot N_u \cdot A \cdot F \cdot (C + D) + F \cdot E \cdot \left[(C + D) \cdot (A - B) - \sqrt{(C^2 + D^2) \cdot (A - B)^2 + 2 \cdot C \cdot D \cdot (3 \cdot A^2 - 2 \cdot A \cdot B + B^2)} \right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot V \cdot Y \cdot Z \cdot k \cdot (W \cdot n + X \cdot m)}{p \cdot \left[(W \cdot n + X \cdot m) \cdot (2 \cdot V \cdot Y \cdot k - U \cdot l \cdot o + V \cdot k \cdot o) - o \cdot \sqrt{(W^2 \cdot n^2 + X^2 \cdot m^2) \cdot (U \cdot l - V \cdot k)^2 + 2 \cdot W \cdot X \cdot m \cdot n \cdot (U^2 \cdot l^2 - 2 \cdot U \cdot V \cdot k \cdot l + 3 \cdot V^2 \cdot k^2)} \right]} = 0$$

4RST4AB1R0



$N_1 = 2.55445$
$N_2 = 0.93693$
$N_3 = 1.11600$
$N_4 = 0.57123$
$N_5 = 0.67800$
$R = 0.21085$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := .93693$ $N_3 := 1.11600$

$N_4 := .57123$ $N_5 := .67800$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

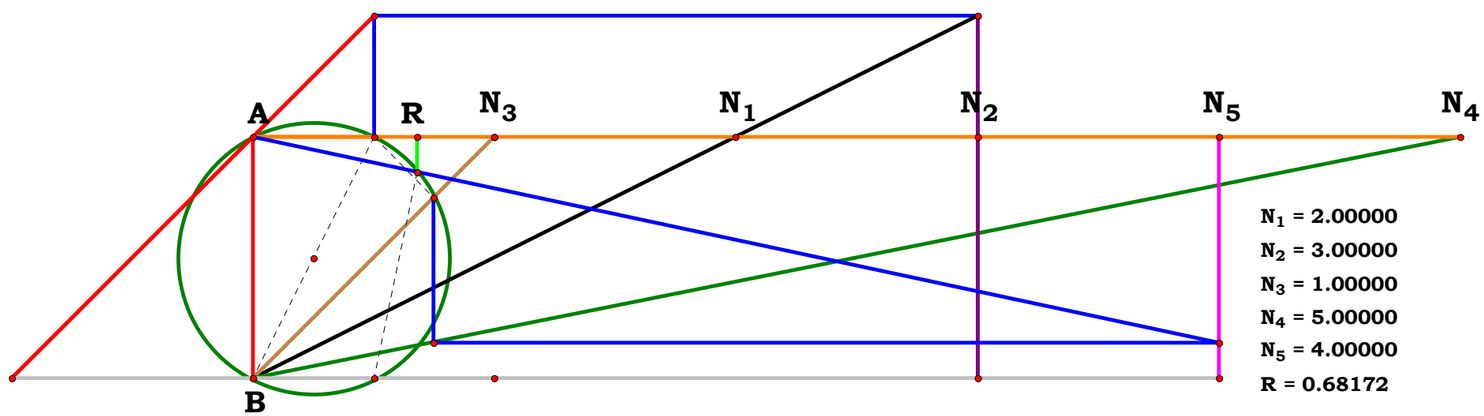
$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$GN_3 := \frac{N_3 \cdot (N_3 + AC)}{BN_3}$ $BG := BN_3 - GN_3$

$BH := \frac{N_3 \cdot BG}{BN_3}$ $FH := \frac{BH}{N_4}$ $BK := \frac{N_5}{AB - FH}$

$AK := \sqrt{AB^2 + BK^2}$ $EK := \frac{BK \cdot (BK + AC)}{AK}$

$AE := AK - EK$ $R := \frac{BK \cdot AE}{AK}$ $R = 0.210851$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 5.00000$
$N_5 = 4.00000$
$R = 0.68172$

Definitions.

$$\frac{(N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)) \cdot (N_3^2 \cdot ((N_1-N_2)+N_1 \cdot N_4) - N_1 \cdot (N_3-N_4)) - (N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2+1)^2 \cdot (N_1-N_2))}{(N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1))^2 + (N_1 \cdot N_4 \cdot (N_3^2+1))^2 + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)) + (N_3 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3))^2} - R = 0.00000$$

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_4 - N_3 + N_3^2 \cdot N_4 + N_3^2 \cdot AC - N_4 \cdot N_5 \cdot AC - N_3^2 \cdot N_4 \cdot N_5 \cdot AC)}{N_3^4 \cdot N_4^2 \cdot N_5^2 + N_3^4 \cdot N_4^2 + 2 \cdot N_3^4 \cdot N_4 \cdot AC + N_3^4 \cdot AC^2 - 2 \cdot N_3^3 \cdot N_4 - 2 \cdot N_3^3 \cdot AC + 2 \cdot N_3^2 \cdot N_4^2 \cdot N_5^2 + 2 \cdot N_3^2 \cdot N_4^2 + 2 \cdot N_3^2 \cdot N_4 \cdot AC + N_3^2 - 2 \cdot N_3 \cdot N_4 + N_4^2 \cdot N_5^2 + N_4^2} = 0$$

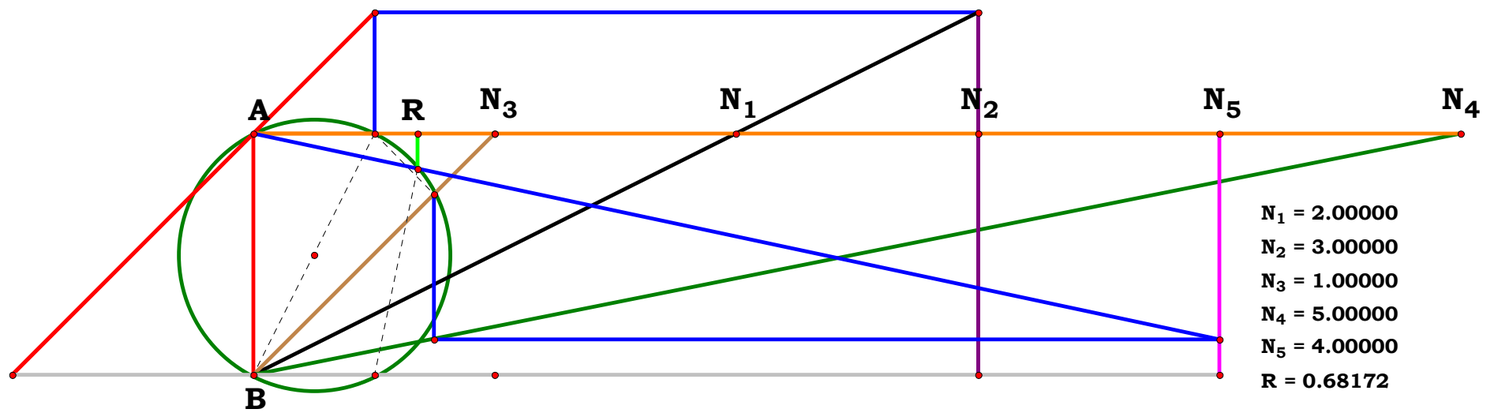
$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot [N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)] - N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2 + 1)^2 \cdot (N_1 - N_2)}{N_5^2 \cdot N_1^2 \cdot N_4^2 \cdot (N_3^2 + 1)^2 + N_1^2 \cdot N_4^2 \cdot (N_3^2 + 1)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) + N_3^2 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{E \cdot B \cdot N_u \cdot (C^2 + N_u^2) \cdot [[N_u \cdot (B - A) - B \cdot C] \cdot D + B \cdot (C^2 + N_u^2)] + B \cdot N_u^2 \cdot (C^2 + N_u^2)^2 \cdot (A - B)}{[D \cdot [B \cdot C + N_u \cdot (A - B)] - [B \cdot (C^2 + N_u^2)]]^2 \cdot E^2 + B^2 \cdot N_u^2 \cdot (C^2 + N_u^2)^2} = 0$$

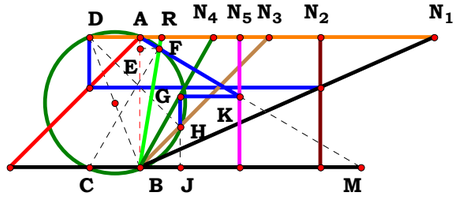
$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot \left(X^2 + n^2\right) \cdot \left[Z \cdot Y \cdot \left(X^2 + n^2\right) \cdot (W \cdot l - V \cdot m) + X^2 \cdot p \cdot (V \cdot Y \cdot m + V \cdot m \cdot o - W \cdot l \cdot o) + V \cdot m \cdot n \cdot p \cdot (Y \cdot n - X \cdot o)\right]}{V^2 \cdot Y^2 \cdot m^2 \cdot \left(X^2 + n^2\right)^2 \cdot \left(Z^2 + p^2\right) + 2 \cdot Y \cdot V \cdot X \cdot m \cdot o \cdot p^2 \cdot \left(X^2 + n^2\right) \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n) + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)^2} = 0$$



$$\frac{(N_1 \cdot N_4 \cdot N_5 \cdot (N_3{}^2+1)) \cdot (N_3{}^2 \cdot ((N_1-N_2)+N_1 \cdot N_4)-N_1 \cdot (N_3-N_4))-(N_1 \cdot N_4{}^2 \cdot N_5{}^2 \cdot (N_3{}^2+1)^2 \cdot (N_1-N_2))}{(N_1 \cdot N_4 \cdot N_5 \cdot (N_3{}^2+1))^2+(N_1 \cdot N_4 \cdot (N_3{}^2+1))^2+(2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_3{}^2+1) \cdot (N_1 \cdot N_3-N_1-N_2 \cdot N_3))+(N_3 \cdot (N_1 \cdot N_3-N_1-N_2 \cdot N_3))^2} - R = 0.00000$$

4RST4AB1R2



$N_1 = 2.25419$
$N_2 = 1.38247$
$N_3 = 0.99009$
$N_4 = 0.56155$
$N_5 = 0.76518$
$R = 0.16461$

Unit. $AB := 1$ **Given.** $N_1 := 2.25419$ $N_2 := 1.38247$ $N_3 := .99009$ $N_4 := .56155$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_1 - N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BH := BN_3 - HN_3$$

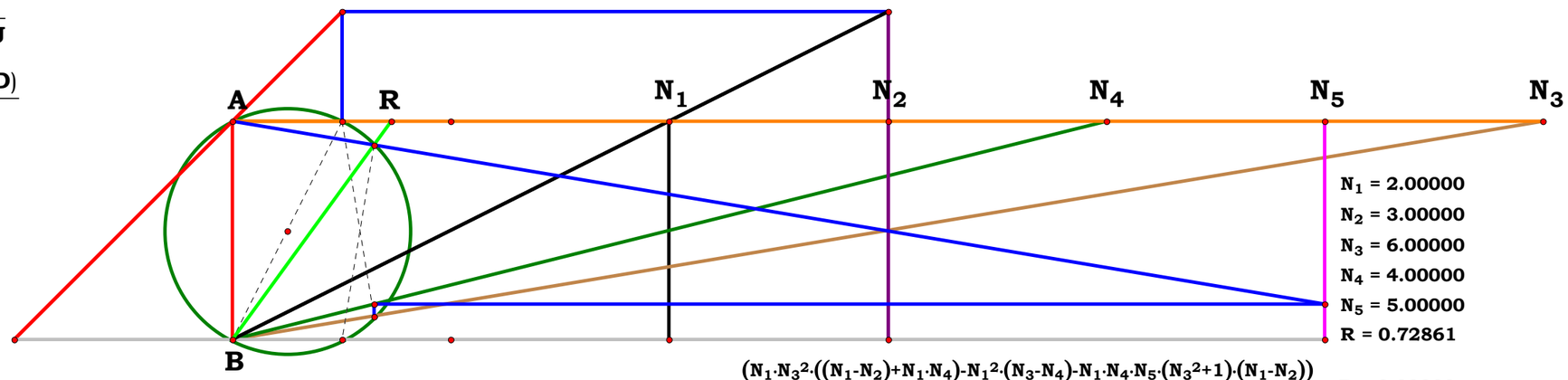
$$BJ := \frac{N_3 \cdot BH}{BN_3} \qquad GJ := \frac{BJ}{N_4} \qquad BM := \frac{N_5}{AB - GJ}$$

$$AM := \sqrt{AB^2 + BM^2} \qquad FM := \frac{BM \cdot (BM + AD)}{AM}$$

$$AF := AM - FM \qquad EF := \frac{BM \cdot AF}{AM}$$

$$AE := \frac{AF}{AM} \qquad R := \frac{EF}{AB - AE}$$

$R = 0.164617$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 6.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 0.72861$

$$\frac{(N_1 \cdot N_3^2 \cdot ((N_1 - N_2) + N_1 \cdot N_4) - N_1^2 \cdot (N_3 - N_4) - N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 - N_2))}{(N_1 \cdot N_4 \cdot (N_3^2 + 1) \cdot ((N_1 - N_2) + N_1 \cdot N_5) + N_3 \cdot (N_1 - N_2) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 - N_3 + N_3^2 \cdot N_4 + N_3^2 \cdot AD - N_4 \cdot N_5 \cdot AD - N_3^2 \cdot N_4 \cdot N_5 \cdot AD}{N_3^2 \cdot AD^2 + N_4 \cdot N_3^2 \cdot AD + N_4 \cdot N_5 \cdot N_3^2 - N_3 \cdot AD + N_4 \cdot AD + N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1^2 \cdot (N_3 - N_4) - N_5 \cdot N_1 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2)}{N_1 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2 + N_1 \cdot N_5) + N_3 \cdot (N_1 - N_2) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)} = 0$$

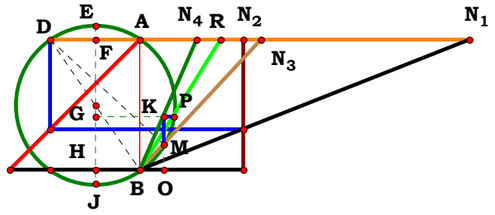
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{E \cdot [B \cdot (B \cdot C^2 + B \cdot N_u^2 - B \cdot C \cdot D - A \cdot D \cdot N_u + B \cdot D \cdot N_u)] + B \cdot N_u \cdot (C^2 + N_u^2) \cdot (A - B)}{B^2 \cdot N_u^3 + E \cdot [(A - B) \cdot (B \cdot C \cdot D - B \cdot N_u^2 - B \cdot C^2 + A \cdot D \cdot N_u - B \cdot D \cdot N_u)] + B^2 \cdot C^2 \cdot N_u} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot m \cdot [Z \cdot Y \cdot (X^2 + n^2) \cdot (W \cdot l - V \cdot m) + V \cdot m \cdot p \cdot (X^2 \cdot Y + Y \cdot n^2 + X^2 \cdot o - X \cdot n \cdot o) - W \cdot X^2 \cdot l \cdot o \cdot p]}{Z \cdot V^2 \cdot Y \cdot m^2 \cdot (X^2 + n^2) + Y \cdot V \cdot m \cdot p \cdot (X^2 + n^2) \cdot (V \cdot m - W \cdot l) + X \cdot o \cdot p \cdot (V \cdot m - W \cdot l) \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)} = 0$$

4RST4AB1R4



$N_1 = 2.52540$
$N_2 = 0.79164$
$N_3 = 0.93197$
$N_4 = 0.43563$
$R = 0.62289$

Unit. $AB := 1$ Given. $N_1 := 2.52540$ $N_2 := .79164$ $N_3 := .93197$ $N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

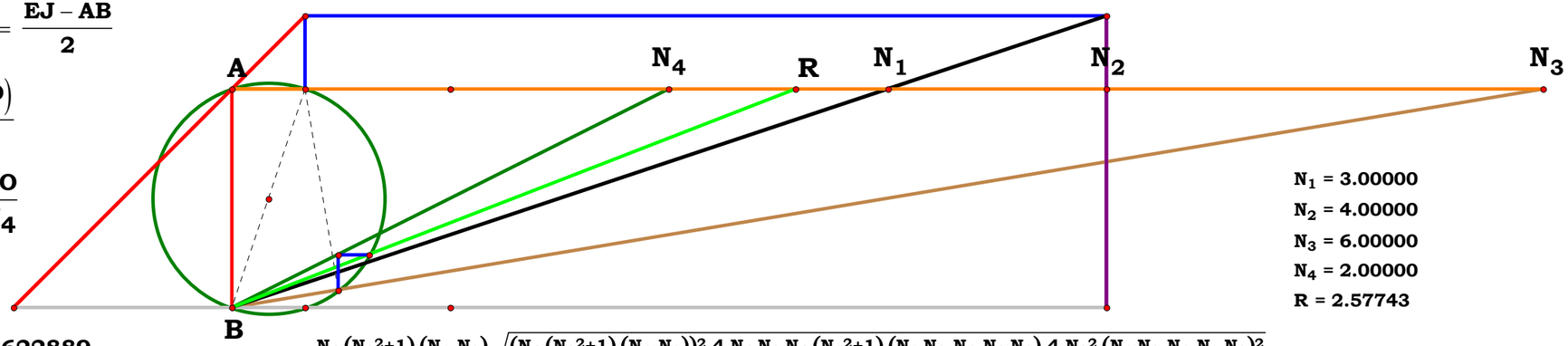
$AD := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AD^2}$ $EF := \frac{EJ - AB}{2}$

$BN_3 := \sqrt{AB^2 + N_3^2}$ $MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BM := BN_3 - MN_3$ $BO := \frac{N_3 \cdot BM}{BN_3}$ $KO := \frac{BO}{N_4}$

$GJ := KO + EF$ $EG := EJ - GJ$

$GP := \sqrt{EG \cdot GJ}$ $R := \frac{(2 \cdot GP - AD)}{2 \cdot KO}$ $R = 0.622889$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 6.00000$
$N_4 = 2.00000$
$R = 2.57743$

$$\frac{N_4 \cdot (N_3^2+1) \cdot (N_1-N_2) - \sqrt{(N_4 \cdot (N_3^2+1) \cdot (N_1-N_2))^2 - 4 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) - 4 \cdot N_3^2 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)^2}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4^2} \cdot AD \cdot N_4 \cdot (N_3^2 + 1) - N_4 \cdot \sqrt{N_3 \cdot N_4 \cdot \left[AD \cdot N_3 \cdot (2 \cdot AD \cdot N_4 - 4 \cdot N_3^2 + AD \cdot N_3^2 \cdot N_4 - 4) + 4 \cdot N_3^2 + 4\right]} + 4 \cdot N_3^2 \cdot \left[AD \cdot N_3 \cdot (2 - AD \cdot N_3) - 1\right] + AD^2 \cdot N_4^2}{2 \cdot \sqrt{N_4^2} \cdot N_3 \cdot (AD \cdot N_3 - 1)} = 0$$

$$R - \frac{N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_2) - \sqrt{N_4^2 \cdot (N_3^2 + 1)^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_3^2 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)^2 + 4 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_3^2 + 1) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)} = 0$$

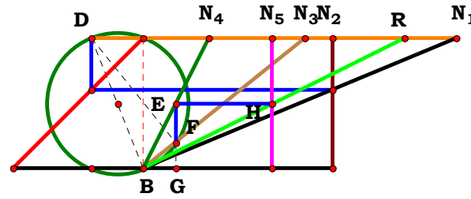
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{\left(C^2 + N_u^2\right)^2 \cdot (A - B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A - B)\right] + B \cdot C \cdot (C - D)\right]} + \left(C^2 + N_u^2\right) \cdot (A - B)}{2 \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (Y^2 + o^2) \cdot (W \cdot n - X \cdot m) - \sqrt{Z^2 \cdot (Y^2 + o^2)^2 \cdot (W \cdot n - X \cdot m)^2 - 4 \cdot Z \cdot W \cdot Y \cdot n \cdot p \cdot (Y^2 + o^2) \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m - W \cdot n \cdot o) - 4 \cdot Y^2 \cdot p^2 \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m - W \cdot n \cdot o)^2}}{2 \cdot Y \cdot p \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m - W \cdot n \cdot o)} = 0$$

4RST4AB1R7



$N_1 = 2.39948$
$N_2 = 1.45027$
$N_3 = 1.24192$
$N_4 = 0.50343$
$N_5 = 0.98795$
$R = 2.00146$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.45027$ $N_3 := 1.24192$ $N_4 := .50343$ $N_5 := .98795$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{BG}{N_4}$

$R := \frac{N_5}{EG}$ $R = 2.001469$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (1 - AD \cdot N_3)}$$

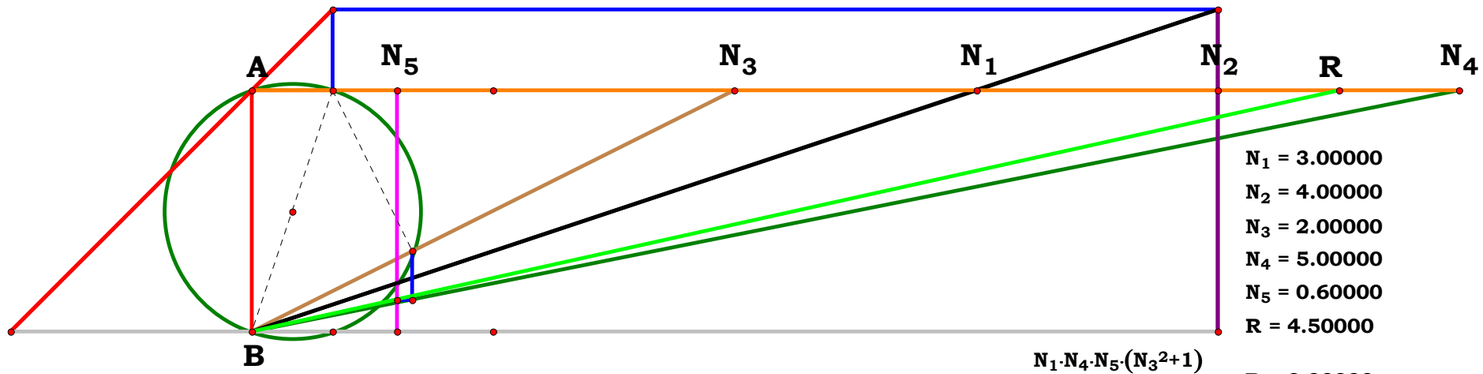
$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [B \cdot C \cdot D + D \cdot N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

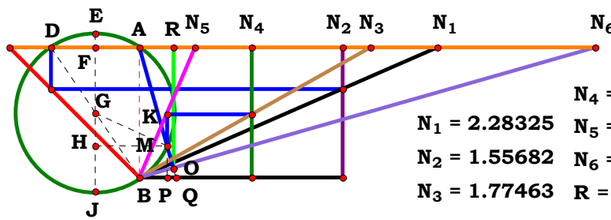
$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 5.00000$
$N_5 = 0.60000$
$R = 4.50000$

$$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$$

4RST4AB2R1



$N_4 = 0.86181$
$N_1 = 2.28325$ $N_5 = 0.43025$
$N_2 = 1.55682$ $N_6 = 3.49657$
$N_3 = 1.77463$ $R = 0.25715$

Unit. $AB := 1$ Given. $N_1 := 2.28325$ $N_2 := 1.55682$ $N_3 := 1.77463$

$N_4 := .86181$ $N_5 := .43025$ $N_6 := 3.49657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

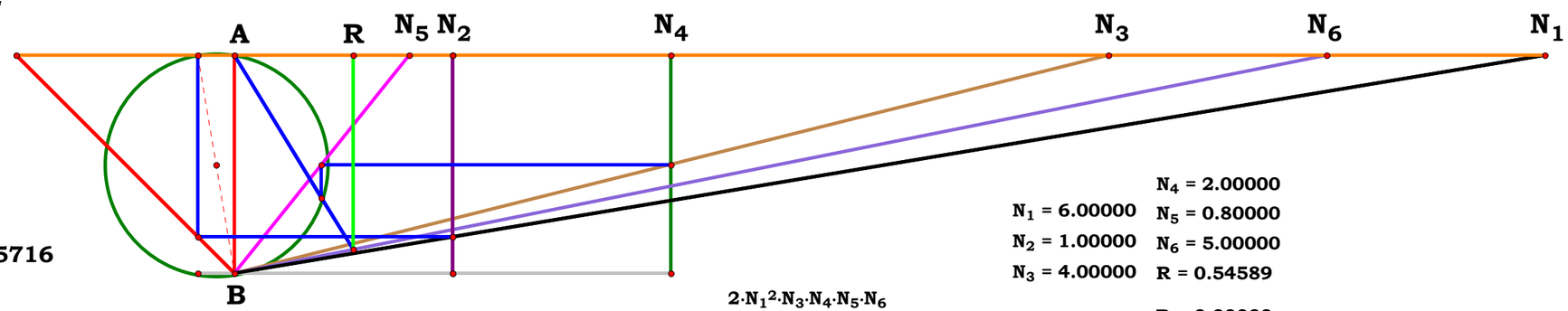
$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

$AD := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AD^2}$ $AF := \frac{AD}{2}$

$BP := N_5 \cdot \frac{N_4}{N_3}$ $HM := AF + BP$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - HM^2}$ $FH := \frac{AB}{2} + GH$

$BQ := \frac{HM - AF}{FH}$ $R := \frac{BQ \cdot N_6}{BQ + N_6}$ $R = 0.25716$



$N_4 = 2.00000$
$N_1 = 6.00000$ $N_5 = 0.80000$
$N_2 = 1.00000$ $N_6 = 5.00000$
$N_3 = 4.00000$ $R = 0.54589$

$$\frac{2 \cdot N_1^2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot N_6}{N_1^2 \cdot N_3 \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) + N_6 \cdot \sqrt{N_1^4 \cdot N_3^4 - 4 \cdot N_1^3 \cdot N_3^2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \sqrt{N_3^2}}{\sqrt{N_3^2} \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) + N_3 \cdot N_6 \cdot \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}} = 0$$

$$R - \frac{2 \cdot N_1^2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot N_6}{N_6 \cdot \sqrt{N_1^4 \cdot N_3^4 - 4 \cdot N_1^3 \cdot N_3^2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)} + N_1^2 \cdot N_3 \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5)} = 0$$

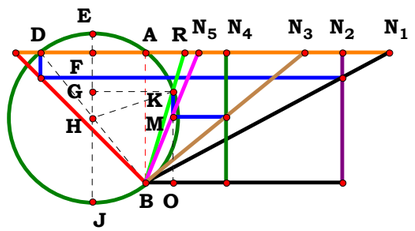
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot \sqrt{B}}{\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot U^2 \cdot W \cdot X \cdot Y \cdot Z \cdot m \cdot \sqrt{l}}{Z \cdot \sqrt{U^3 \cdot W^2 \cdot (U \cdot l \cdot W^2 \cdot n^2 \cdot o^2 - 4 \cdot V \cdot k \cdot W \cdot X \cdot Y \cdot m \cdot n \cdot o - 4 \cdot U \cdot l \cdot X^2 \cdot Y^2 \cdot m^2)} + \sqrt{l} \cdot U^2 \cdot W \cdot (W \cdot Z \cdot n \cdot o + 2 \cdot X \cdot Y \cdot m \cdot p)} = 0$$

4RST4AB2R3



$N_1 = 1.86676$
$N_2 = 1.50839$
$N_3 = 1.22254$
$N_4 = 0.61966$
$N_5 = 0.41087$
$R = 0.29929$

Unit. $AB := 1$ Given. $N_1 := 1.86676$ $N_2 := 1.50839$ $N_3 := 1.22254$ $N_4 := .61966$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .41087$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

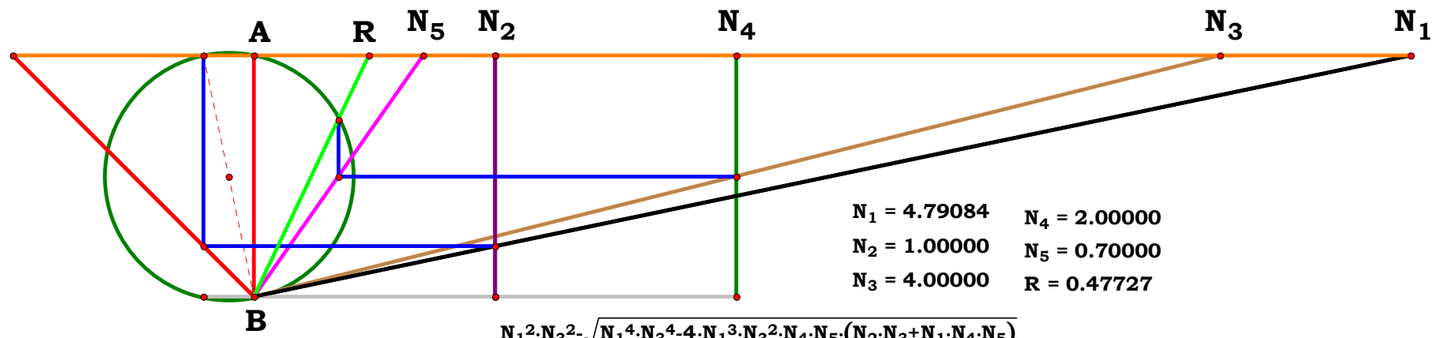
Descriptions.

$AD := \frac{N_2}{N_1}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$GK := \frac{AD}{2} + BO$ $EJ := \sqrt{AB^2 + AD^2}$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - GK^2}$ $EF := \frac{EJ - AB}{2}$

$KO := \frac{EJ}{2} + GH - EF$ $R := \frac{BO}{KO}$ $R = 0.299284$



$N_1 = 4.79084$ $N_4 = 2.00000$
$N_2 = 1.00000$ $N_5 = 0.70000$
$N_3 = 4.00000$ $R = 0.47727$

$$\frac{N_1^2 \cdot N_3^2 - \sqrt{N_1^4 \cdot N_3^4 - 4 \cdot N_1^3 \cdot N_3^2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)}}{2 \cdot N_1 \cdot N_3 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{N_3^2}}{N_3 \cdot \left(\sqrt{N_3^2} + \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}\right)} = 0$$

$$R - \frac{N_1^2 \cdot N_3^2 - \sqrt{N_1^4 \cdot N_3^4 - 4 \cdot N_1^3 \cdot N_3^2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)}}{2 \cdot N_1 \cdot N_3 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)} = 0$$

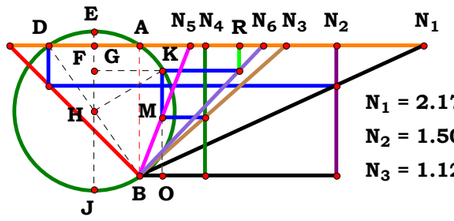
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{\sqrt{B} \cdot \left[\sqrt{B} \cdot D \cdot E - \sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)}\right]}{2 \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{m} \cdot \left[V^2 \cdot X^2 \cdot \sqrt{m} \cdot o \cdot p - \sqrt{\left[V^3 \cdot X^2 \cdot (V \cdot m \cdot X^2 \cdot o^2 \cdot p^2 - 4 \cdot W \cdot l \cdot X \cdot Y \cdot Z \cdot n \cdot o \cdot p - 4 \cdot V \cdot m \cdot Y^2 \cdot Z^2 \cdot n^2)\right]}\right]}{2 \cdot V \cdot X \cdot (V \cdot Y \cdot Z \cdot m \cdot n + W \cdot X \cdot l \cdot o \cdot p)} = 0$$

4RST4AB2R5



$N_1 = 2.17671$
$N_2 = 1.50839$
$N_3 = 1.12332$
$N_4 = 0.50580$
$N_5 = 0.39150$
$N_6 = 0.94921$
$R = 0.76988$

Unit. $AB := 1$ **Given.** $N_1 := 2.17671$ $N_2 := 1.50839$ $N_3 := 1.12332$ $N_4 := .50580$ $N_5 := .39150$ $N_6 := .94921$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

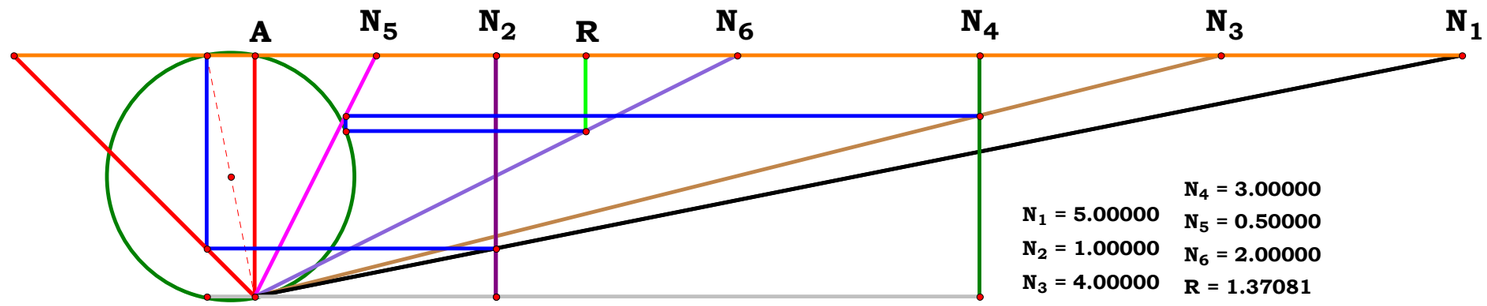
$AD := \frac{N_2}{N_1}$ $MO := \frac{N_4}{N_3}$

$BO := N_5 \cdot MO$ $FK := BO + \frac{AD}{2}$

$EJ := \sqrt{AD^2 + AB^2}$ $HK := \frac{EJ}{2}$

$FH := \sqrt{HK^2 - FK^2}$ $EF := \frac{EJ - AB}{2}$

$KO := HK + FH - EF$ $R := N_6 \cdot KO$ $R = 0.76988$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 0.50000$
$N_6 = 2.00000$
$R = 1.37081$

Definitions.

$$R - \frac{N_6 \cdot \left(\sqrt{N_3^2} + \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}\right)}{2 \cdot \sqrt{N_3^2}} = 0$$

$$R - \frac{N_6 \cdot \left[\sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)} + N_1 \cdot N_3\right]}{2 \cdot (N_1 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot D \cdot E\right]}{2 \cdot F \cdot \sqrt{B} \cdot D \cdot E} = 0$$

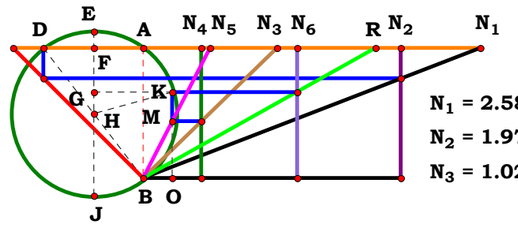
$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{\left[U \cdot \left(U \cdot l \cdot W^2 \cdot n^2 \cdot o^2 - 4 \cdot V \cdot k \cdot W \cdot X \cdot Y \cdot m \cdot n \cdot o - 4 \cdot U \cdot l \cdot X^2 \cdot Y^2 \cdot m^2\right)\right]} + U \cdot W \cdot \sqrt{l} \cdot n \cdot o\right]}{2 \cdot U \cdot W \cdot \sqrt{l} \cdot n \cdot o \cdot p} = 0$$

B

$$\frac{N_6 \cdot \left(N_1 \cdot N_3 + \sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)}\right)}{2 \cdot N_1 \cdot N_3} - R = 0.00000$$

4RST4AB2R6



$N_1 = 2.58351$
$N_2 = 1.97331$
$N_3 = 1.02646$
$N_4 = 0.44768$
$N_5 = 0.51742$
$N_6 = 1.18167$
$R = 1.78115$

Unit. $AB := 1$ **Given.** $N_1 := 2.58351$ $N_2 := 1.97331$ $N_3 := 1.02646$

$N_4 := .44768$ $N_5 := .51742$ $N_6 := 1.18167$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AD := \frac{N_2}{N_1}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$EJ := \sqrt{AD^2 + AB^2}$ $EF := \frac{EJ - AB}{2}$

$HK := \frac{EJ}{2}$ $GK := \frac{AD}{2} + BO$ $GH := \sqrt{HK^2 - GK^2}$

$KO := HK + GH - EF$ $R := \frac{N_6}{KO}$ $R = 1.78117$

Definitions.

$$R - \frac{2 \cdot N_6 \cdot \sqrt{N_3^2}}{\sqrt{N_3^2} + \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}} = 0$$

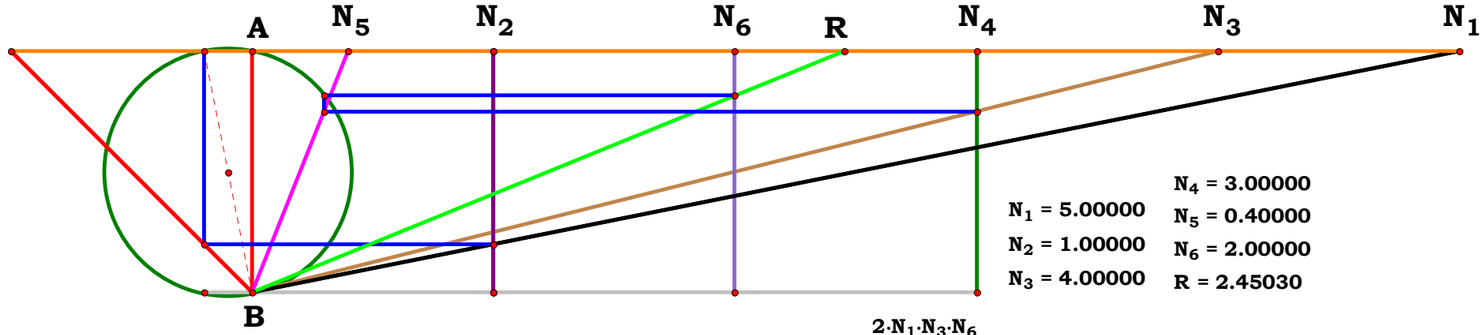
$$R - \frac{2 \cdot N_6 \cdot (N_1 \cdot N_3)}{\sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)} + N_1 \cdot N_3} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{B} \cdot D \cdot E}{F \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot D \cdot E\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

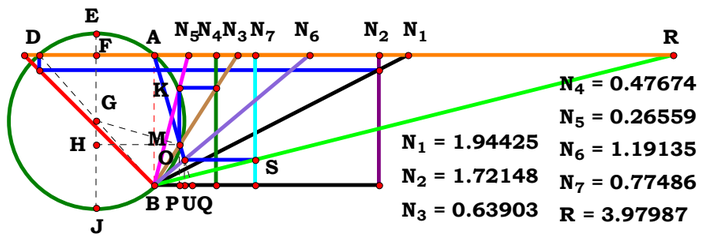
$$R - \frac{2 \cdot N_u \cdot U \cdot W \cdot \sqrt{l} \cdot n \cdot o}{F \cdot \left[\sqrt{-U \cdot (4 \cdot V \cdot k \cdot W \cdot X \cdot Y \cdot m \cdot n \cdot o - U \cdot l \cdot W^2 \cdot n^2 \cdot o^2 + 4 \cdot U \cdot l \cdot X^2 \cdot Y^2 \cdot m^2)} + U \cdot W \cdot \sqrt{l} \cdot n \cdot o\right]} = 0$$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 0.40000$
$N_6 = 2.00000$
$R = 2.45030$

$$\frac{2 \cdot N_1 \cdot N_3 \cdot N_6}{N_1 \cdot N_3 + \sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5)}} - R = 0.00000$$

4RST4AB2R10



Unit. $AB := 1$ Given. $N_1 := 1.94425$ $N_2 := 1.72148$ $N_3 := .63903$ $N_4 := .47674$

$N_5 := .26559$ $N_6 := 1.19135$ $N_7 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

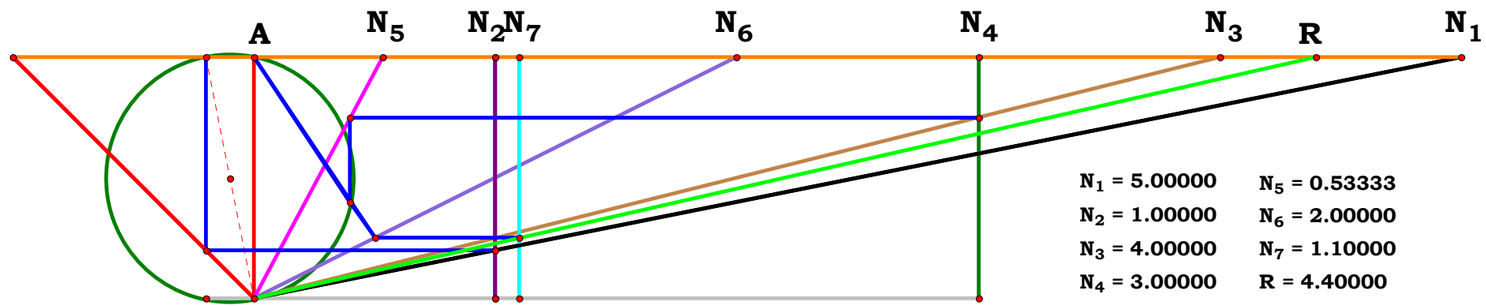
$AD := \frac{N_2}{N_1}$ $BP := N_5 \cdot \frac{N_4}{N_3}$ $EJ := \sqrt{AD^2 + AB^2}$

$EF := \frac{EJ - AB}{2}$ $GM := \frac{EJ}{2}$ $HM := \frac{AD}{2} + BP$

$GH := \sqrt{GM^2 - HM^2}$ $FH := GM + GH - EF$

$BQ := \frac{BP}{FH}$ $BU := \frac{N_6 \cdot BQ}{N_6 + BQ}$ $OU := \frac{BU}{N_6}$

$R := \frac{N_7}{OU}$ $R = 3.979731$



Definitions.

$$R - \frac{N_7 \cdot \left[\sqrt{N_3^2} \cdot \left(N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5\right) + N_3 \cdot N_6 \cdot \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}\right]}{2 \cdot N_4 \cdot N_5 \cdot \sqrt{N_3^2}} = 0$$

$$R - \frac{N_7 \cdot \left[N_6 \cdot \sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot \left(N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5\right)} + N_1 \cdot \left(N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5\right)\right]}{2 \cdot N_1 \cdot N_4 \cdot N_5} = 0$$

$$\frac{N_7 \cdot \left(N_1 \cdot N_3 \cdot N_6 + 2 \cdot N_1 \cdot N_4 \cdot N_5 + N_6 \cdot \sqrt{N_1^2 \cdot N_3^2 - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot \left(N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5\right)}\right)}{2 \cdot N_1 \cdot N_4 \cdot N_5} - R = 0.00000$$

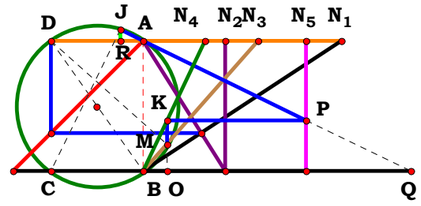
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{2 \cdot C \cdot F \cdot G \cdot \sqrt{B}} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[Y \cdot \sqrt{\left[T \cdot \left(T \cdot k \cdot V^2 \cdot m^2 \cdot n^2 - 4 \cdot U \cdot j \cdot V \cdot W \cdot X \cdot l \cdot m \cdot n - 4 \cdot T \cdot k \cdot W^2 \cdot X^2 \cdot l^2\right)\right]} + \sqrt{k} \cdot T \cdot (V \cdot Y \cdot m \cdot n + 2 \cdot W \cdot X \cdot l \cdot o)\right]}{2 \cdot T \cdot W \cdot X \cdot l \cdot o \cdot p \cdot \sqrt{k}} = 0$$

4RST4AB3R0



$N_1 = 1.51808$
$N_2 = 0.62698$
$N_3 = 0.88354$
$N_4 = 0.47437$
$N_5 = 1.24947$
$R = -0.17873$

Unit. $AB := 1$ Given. $N_1 := 1.51808$ $N_2 := .62698$ $N_3 := .88354$ $N_4 := .47437$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := 1.24947$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

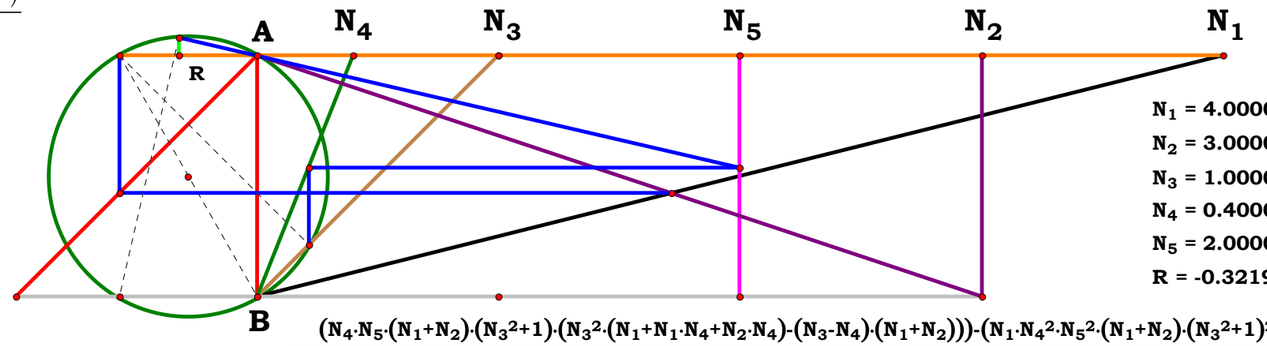
$AD := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BM := BN_3 - MN_3$ $BO := \frac{N_3 \cdot BM}{BN_3}$ $KO := \frac{BO}{N_4}$

$BQ := \frac{N_5}{AB - KO}$ $AQ := \sqrt{AB^2 + BQ^2}$

$JQ := \frac{BQ \cdot (BQ + AD)}{AQ}$ $AJ := AQ - JQ$

$R := \frac{BQ \cdot AJ}{AQ}$ $R = -0.178733$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 2.00000$
$R = -0.32194$

$$\frac{(N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot (N_3^2 \cdot (N_1+N_1 \cdot N_4+N_2 \cdot N_4)-(N_3-N_4) \cdot (N_1+N_2)))-(N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_1+N_2) \cdot (N_3^2+1)^2)}{(N_4^2 \cdot (N_3^2+1)^2 \cdot (N_5^2+1) \cdot (N_1+N_2)^2)+(2 \cdot N_3 \cdot N_4 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot (N_1 \cdot N_3-N_2-N_1))+(N_3^2 \cdot (N_1 \cdot N_3-N_2-N_1)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1) \cdot \left[N_3^2 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4) - (N_3 - N_4) \cdot (N_1 + N_2)\right] - N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)^2}{N_4^2 \cdot (N_3^2 + 1)^2 \cdot (N_5^2 + 1) \cdot (N_1 + N_2)^2 + 2 \cdot N_3 \cdot N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1) \cdot (N_1 \cdot N_3 - N_2 - N_1) + N_3^2 \cdot (N_1 \cdot N_3 - N_2 - N_1)^2} = 0$$

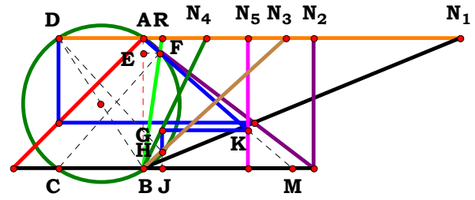
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B) \cdot \left[[E \cdot (A + B)] \cdot N_u^2 - B \cdot N_u \cdot (C^2 - D \cdot E) - B \cdot N_u^3 + C \cdot E \cdot (C - D) \cdot (A + B)\right]}{E^2 \cdot \left[(A + B) \cdot N_u^2 + B \cdot D \cdot N_u + C \cdot (C - D) \cdot (A + B)\right]^2 + N_u^2 \cdot (C^2 + N_u^2)^2 \cdot (A + B)^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2) \cdot \left[W \cdot l \cdot p \cdot (Y \cdot X^2 - o \cdot X \cdot n + Y \cdot n^2) + V \cdot m \cdot (X^2 \cdot Y \cdot p - Y \cdot Z \cdot n^2 - X^2 \cdot Y \cdot Z + Y \cdot n^2 \cdot p + X^2 \cdot o \cdot p - X \cdot n \cdot o \cdot p)\right]}{Y^2 \cdot (X^2 + n^2)^2 \cdot (Z^2 + p^2) \cdot (V \cdot m + W \cdot l)^2 + 2 \cdot Y \cdot X \cdot o \cdot p^2 \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n) + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n)^2} = 0$$

4RST4AB3R2



$N_1 = 2.42854$
$N_2 = 1.30499$
$N_3 = 1.09663$
$N_4 = 0.48406$
$N_5 = 0.80392$
$R = 0.14432$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 1.30499$ $N_3 := 1.09663$ $N_4 := .48406$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .80392$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_1}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2}$$

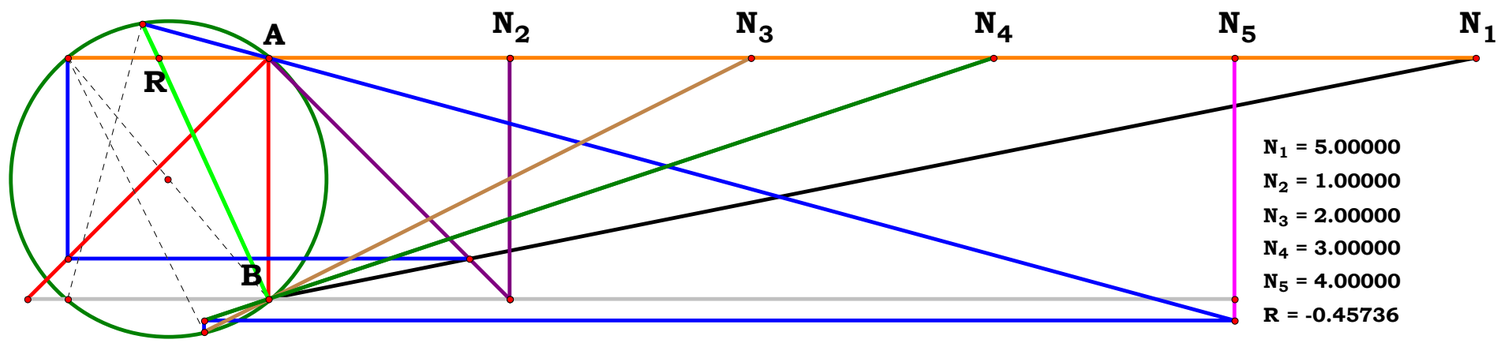
$$HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BH := BN_3 - HN_3$$

$$BJ := \frac{N_3 \cdot BH}{BN_3} \qquad GJ := \frac{BJ}{N_4} \qquad BM := \frac{N_5}{AB - GJ}$$

$$AM := \sqrt{AB^2 + BM^2} \qquad FM := \frac{BM \cdot (BM + AD)}{AM}$$

$$AF := AM - FM \qquad EF := \frac{BM \cdot AF}{AM} \qquad AE := \frac{AF}{AM}$$

$$R := \frac{EF}{AB - AE} \qquad R = 0.144317$$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$N_5 = 4.00000$
$R = -0.45736$

$$\frac{((N_1+N_2)\cdot(N_4\cdot(N_3^2+1)\cdot((N_1+N_2)-N_1\cdot N_5)+N_3\cdot((N_1\cdot N_3)-(N_1+N_2))))}{(N_4\cdot(N_3^2+1)\cdot(N_1+N_2)\cdot(N_1+N_1\cdot N_5+N_2\cdot N_5)+(N_1\cdot N_3)\cdot((N_1\cdot N_3)-(N_1+N_2)))} - R = 0.00000$$

Definitions.

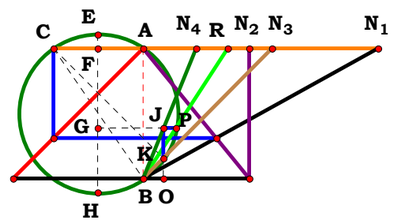
$$R - \frac{(N_1 + N_2)\cdot\left[N_4\cdot\left(N_3^2 + 1\right)\cdot(N_1 + N_2 - N_1\cdot N_5) + N_3\cdot(N_1\cdot N_3 - N_2 - N_1)\right]}{N_4\cdot\left(N_3^2 + 1\right)\cdot(N_1 + N_2)\cdot(N_1 + N_1\cdot N_5 + N_2\cdot N_5) + N_1\cdot N_3\cdot(N_1\cdot N_3 - N_2 - N_1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{(A+B)\cdot\left[E\cdot\left[\left(C^2 + N_u^2\right)\cdot(A+B) - D\cdot\left[C\cdot(A+B) - B\cdot N_u\right]\right] - \left(B\cdot C^2\cdot N_u + B\cdot N_u^3\right)\right]}{E\cdot B\cdot\left[\left(C^2 + N_u^2\right)\cdot(A+B) - D\cdot\left[C\cdot(A+B) - B\cdot N_u\right]\right] + N_u\cdot\left(C^2 + N_u^2\right)\cdot(A+B)^2} = 0 \qquad N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{(V\cdot m + W\cdot l)\cdot\left[Y\cdot\left(X^2 + n^2\right)\cdot(V\cdot m\cdot p - V\cdot Z\cdot m + W\cdot l\cdot p) + X\cdot o\cdot p\cdot(V\cdot X\cdot m - V\cdot m\cdot n - W\cdot l\cdot n)\right]}{Y\cdot\left(X^2 + n^2\right)\cdot(V\cdot m + W\cdot l)\cdot(V\cdot Z\cdot m + W\cdot Z\cdot l + V\cdot m\cdot p) + V\cdot X\cdot m\cdot o\cdot p\cdot(V\cdot X\cdot m - V\cdot m\cdot n - W\cdot l\cdot n)} = 0$$

4RST4AB3R4



$N_1 = 1.79896$
$N_2 = 0.81101$
$N_3 = 0.99009$
$N_4 = 0.40657$
$R = 0.64704$

Unit. $AB := 1$ **Given.** $N_1 := 1.79896$ $N_2 := .81101$ $N_3 := .99009$ $N_4 := .40657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

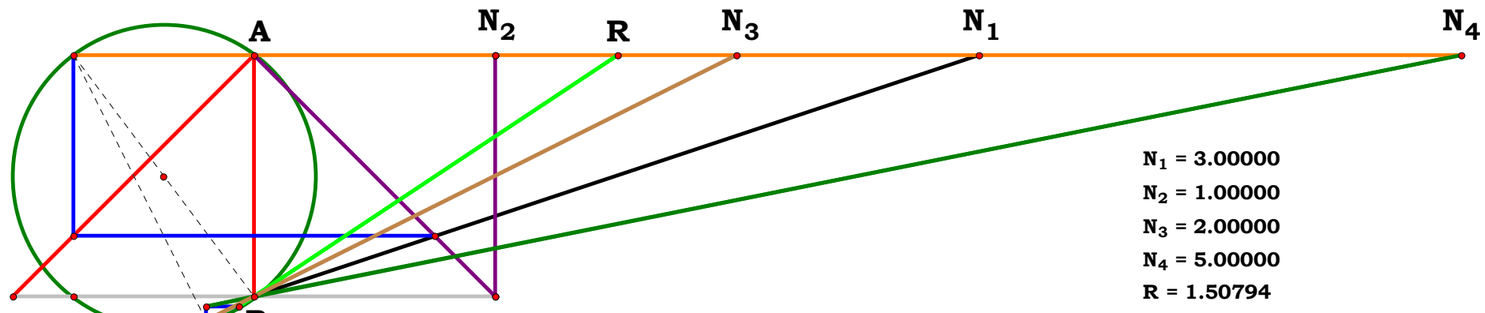
$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$KN_3 := \frac{N_3 \cdot (N_3 + AC)}{BN_3}$ $BK := BN_3 - KN_3$

$BO := \frac{N_3 \cdot BK}{BN_3}$ $JO := \frac{BO}{N_4}$ $GP := JO + EF$

$EG := EH - GP$ $GP := \sqrt{EG \cdot GP}$ $R := \frac{GP - \frac{AC}{2}}{JO}$

$R = 0.647038$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 5.00000$
$R = 1.50794$

$$\frac{(N_1 \cdot N_4) \cdot (N_3^2+1) - \sqrt{((N_1 \cdot N_4) \cdot (N_3^2+1))^2 - 4 \cdot N_3 \cdot (N_3 \cdot ((N_1+N_2) - N_1 \cdot N_3) - N_4 \cdot (N_1+N_2) \cdot (N_3^2+1)) \cdot ((N_1+N_2) - N_1 \cdot N_3)}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - (N_1+N_2))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4^2} \cdot AC \cdot N_4 \cdot (N_3^2 + 1) - N_4 \cdot \sqrt{N_3 \cdot N_4 \cdot \left[AC \cdot N_3 \cdot (2 \cdot AC \cdot N_4 - 4 \cdot N_3^2 + AC \cdot N_3^2 \cdot N_4 - 4) + 4 \cdot N_3^2 + 4\right] + 4 \cdot N_3^2 \cdot \left[AC \cdot N_3 \cdot (2 - AC \cdot N_3) - 1\right] + AC^2 \cdot N_4^2}}{2 \cdot \sqrt{N_4^2} \cdot N_3 \cdot (AC \cdot N_3 - 1)} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot (N_3^2 + 1) - \sqrt{N_1^2 \cdot N_4^2 \cdot (N_3^2 + 1)^2 - 4 \cdot N_3 \cdot \left[N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3) - N_4 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)\right] \cdot (N_1 + N_2 - N_1 \cdot N_3)}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2 - N_1)} = 0$$

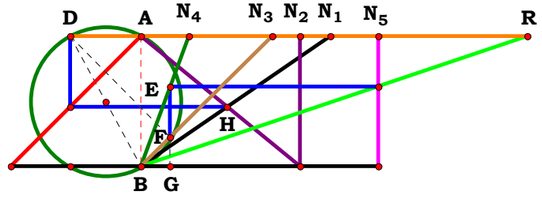
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{4 \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] \cdot \left[C^2 \cdot (A+B) + N_u^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - B \cdot N_u\right]\right] + B^2 \cdot \left(C^2 + N_u^2\right)^2} - B \cdot \left(C^2 + N_u^2\right)}{2 \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot (Y^2 + o^2) - \sqrt{W^2 \cdot Z^2 \cdot n^2 \cdot (Y^2 + o^2)^2 - 4 \cdot Y^2 \cdot p^2 \cdot (W \cdot n \cdot o - W \cdot Y \cdot n + X \cdot m \cdot o)^2 + 4 \cdot Y \cdot Z \cdot p \cdot (W \cdot n + X \cdot m) \cdot (Y^2 + o^2) \cdot (W \cdot n \cdot o - W \cdot Y \cdot n + X \cdot m \cdot o)}}{2 \cdot Y \cdot p \cdot (W \cdot Y \cdot n - W \cdot n \cdot o - X \cdot m \cdot o)} = 0$$

4RST4AB3R7



$N_1 = 1.45027$
$N_2 = 1.21782$
$N_3 = 1.00946$
$N_4 = 0.36783$
$N_5 = 1.82093$
$R = 2.96844$

Unit. $AB := 1$ Given. $N_1 := 1.45027$ $N_2 := 1.21782$ $N_3 := 1.00946$ $N_4 := .36783$ $N_5 := 1.82093$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

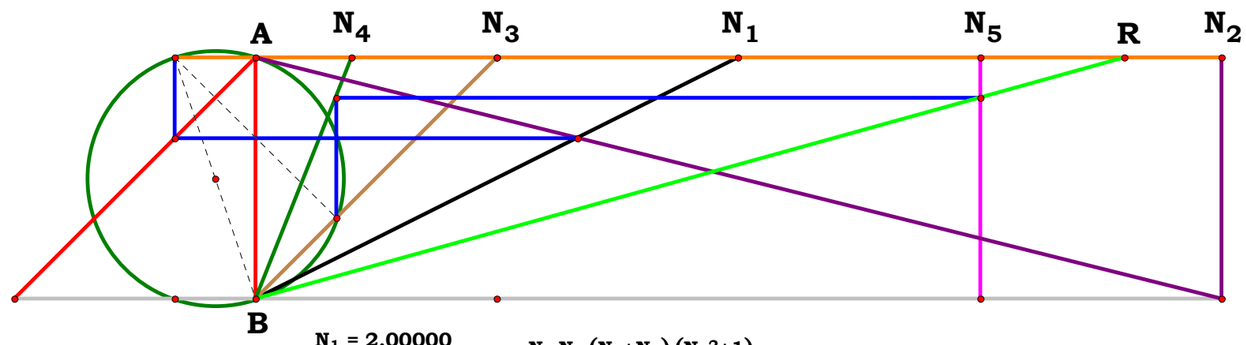
Descriptions.

$AD := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3{}^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{BG}{N_4}$ $R := \frac{N_5}{EG}$

$R = 2.968434$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 3.00000$
$R = 3.60000$

$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_3 \cdot ((N_1 + N_2) - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$

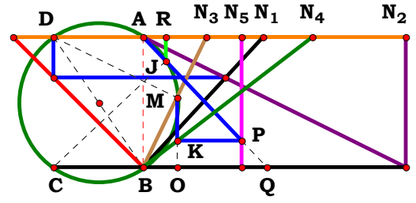
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{N_u \cdot (C^2 + N_u{}^2) \cdot (A + B)}{D \cdot E \cdot [C \cdot (A + B) - B \cdot N_u]} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{o \cdot p \cdot (V \cdot X \cdot m \cdot n - V \cdot X^2 \cdot m + W \cdot X \cdot l \cdot n)} = 0$

4RST4AB4R0



$N_1 = 0.91756$
$N_2 = 2.01205$
$N_3 = 0.48642$
$N_4 = 1.29767$
$N_5 = 0.75549$
$R = 0.17469$

Unit. $AB := 1$ Given. $N_1 := .91756$ $N_2 := 2.01206$ $N_3 := .48642$ $N_4 := 1.29767$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .75549$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

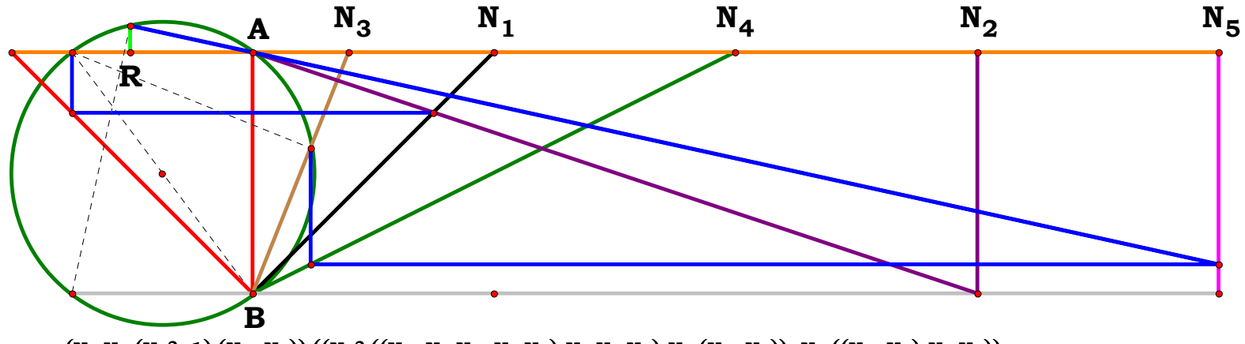
Descriptions.

$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BM := BN_3 - MN_3 \qquad BO := \frac{N_3 \cdot BM}{BN_3} \qquad KO := \frac{BO}{N_4}$$

$$BQ := \frac{N_5}{AB - KO} \qquad AQ := \sqrt{AB^2 + BQ^2} \qquad JQ := \frac{BQ \cdot (BQ + AD)}{AQ}$$

$$AJ := AQ - JQ \qquad R := \frac{BQ \cdot AJ}{AQ} \qquad R = 0.174688$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 0.40000$
$N_4 = 2.00000$
$N_5 = 4.00000$
$R = -0.50573$

$$\frac{(N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_1+N_2)) \cdot ((N_3^2 \cdot ((N_2+N_1 \cdot N_4+N_2 \cdot N_4)-N_2 \cdot N_4 \cdot N_5)-N_3 \cdot (N_1+N_2))+N_4 \cdot ((N_1+N_2)-N_2 \cdot N_5))}{(((N_4 \cdot (N_3^2+1) \cdot (N_1+N_2))^2 \cdot (N_5^2+1))-(2 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot (N_1+N_2) \cdot ((N_1+N_2)-(N_2 \cdot N_3))))+(N_3 \cdot ((N_1+N_2)-(N_2 \cdot N_3)))^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) \cdot \left(N_1 + N_2\right) \cdot \left[N_3^2 \cdot \left(N_2 + N_1 \cdot N_4 + N_2 \cdot N_4 - N_2 \cdot N_4 \cdot N_5\right) - N_3 \cdot \left(N_1 + N_2\right) + N_4 \cdot \left(N_1 + N_2 - N_2 \cdot N_5\right)\right]}{N_4^2 \cdot \left(N_3^2 + 1\right)^2 \cdot \left(N_5^2 + 1\right) \cdot \left(N_1 + N_2\right)^2 - 2 \cdot N_4 \cdot N_3 \cdot \left(N_3^2 + 1\right) \cdot \left(N_1 + N_2\right) \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) + N_3^2 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right)^2} = 0$$

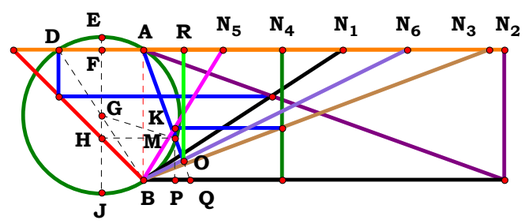
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B) \cdot \left[C^2 \cdot E \cdot (A + B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot \left(E - N_u\right)\right] + E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A + B)\right]}{E^2 \cdot \left[C^2 \cdot (A + B) + N_u^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A + B)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot \left(X^2 + n^2\right) \cdot \left[V \cdot m \cdot p \cdot \left(Y \cdot X^2 - o \cdot X \cdot n + Y \cdot n^2\right) - W \cdot l \cdot \left(X^2 \cdot Y \cdot Z + Y \cdot Z \cdot n^2 - X^2 \cdot Y \cdot p - Y \cdot n^2 \cdot p - X^2 \cdot o \cdot p + X \cdot n \cdot o \cdot p\right)\right]}{Y^2 \cdot \left(X^2 + n^2\right)^2 \cdot \left(Z^2 + p^2\right) \cdot (V \cdot m + W \cdot l)^2 + -2 \cdot Y \cdot X \cdot o \cdot p^2 \cdot \left(X^2 + n^2\right) \cdot (V \cdot m + W \cdot l) \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n) + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)^2} = 0$$

4RST4AB4R1



$N_1 = 1.52776$
$N_2 = 2.76754$
$N_3 = 2.65604$
$N_4 = 1.06521$
$N_5 = 0.61020$
$N_6 = 2.02433$
$R = 0.30553$

Unit. $AB := 1$ Given. $N_1 := 1.52776$ $N_2 := 2.76754$ $N_3 := 2.65604$

$N_4 := 1.06521$ $N_5 := .61020$ $N_6 := 2.02433$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

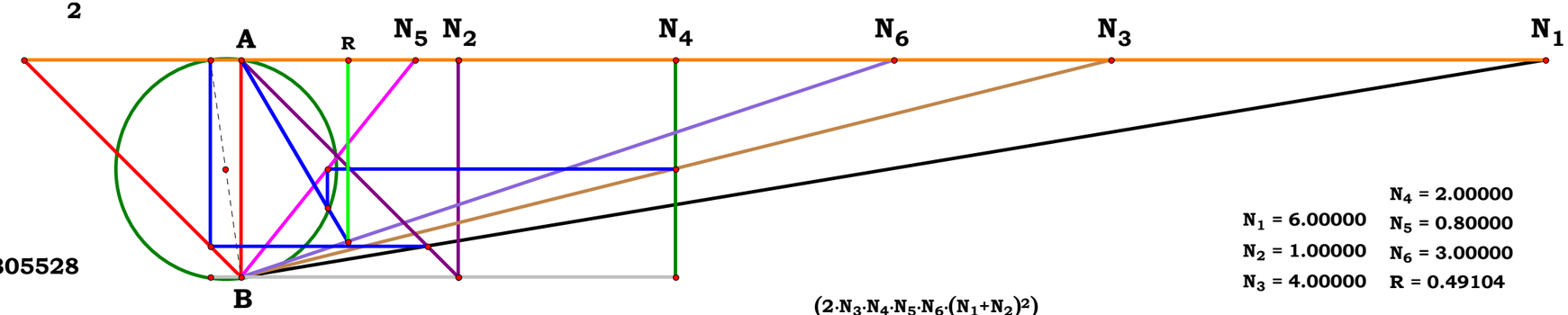
$AD := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AD^2}$ $AF := \frac{AD}{2}$

$BP := N_5 \cdot \frac{N_4}{N_3}$ $HM := AF + BP$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - HM^2}$ $FH := \frac{AB}{2} + GH$

$BQ := \frac{HM - AF}{FH}$ $R := \frac{BQ \cdot N_6}{BQ + N_6}$ $R = 0.305528$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 6.00000$ $N_4 = 2.00000$
$N_2 = 1.00000$ $N_5 = 0.80000$
$N_3 = 4.00000$ $N_6 = 3.00000$
$R = 0.49104$

$$\frac{(2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot N_6 \cdot (N_1 + N_2)^2)}{N_6 \cdot \sqrt{(N_3^2 \cdot (N_1 + N_2)^3) \cdot (N_3^2 \cdot (N_1 + N_2) - 4 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_4 \cdot N_5 \cdot (N_1 + N_2)))} + (N_3 \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) \cdot (N_1 + N_2)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \sqrt{N_3^2}}{\sqrt{N_3^2} \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) + N_3 \cdot N_6 \cdot \sqrt{N_3^2 - 4 \cdot AD \cdot N_3 \cdot N_4 \cdot N_5 - 4 \cdot N_4^2 \cdot N_5^2}} = 0$$

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \sqrt{N_3^2 \cdot (N_1 + N_2)}}{N_3 \cdot N_6 \cdot \sqrt{N_3^2 \cdot (N_1 + N_2) - 4 \cdot N_4 \cdot N_5 \cdot [N_2 \cdot N_3 + N_4 \cdot N_5 \cdot (N_1 + N_2)]} + \sqrt{N_3^2 \cdot (N_1 + N_2)} \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5)} = 0$$

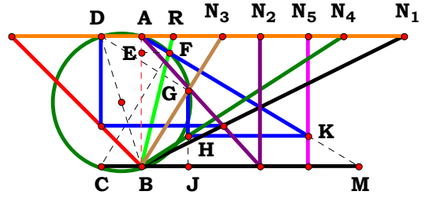
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot (A + B)}{\sqrt{[D^2 \cdot E^2 \cdot (A + B) - 4 \cdot C \cdot N_u \cdot [C \cdot N_u \cdot (A + B) + A \cdot D \cdot E]] \cdot (A + B)} + (2 \cdot C \cdot F + D \cdot E) \cdot (A + B)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X \cdot Y \cdot Z \cdot \sqrt{U \cdot l + V \cdot k} \cdot m}{Z \cdot \sqrt{U \cdot W^2 \cdot l \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2 \cdot (U \cdot l + V \cdot k) + V \cdot W \cdot k \cdot n \cdot o \cdot (W \cdot n \cdot o - 4 \cdot X \cdot Y \cdot m)} + \sqrt{U \cdot l + V \cdot k} \cdot (W \cdot Z \cdot n \cdot o + 2 \cdot X \cdot Y \cdot m \cdot p)} = 0$$

4RST4AB4R2



$N_1 = 2.01205$
$N_2 = 0.90787$
$N_3 = 0.62203$
$N_4 = 1.54950$
$N_5 = 1.27852$
$R = 0.24327$

Unit. $AB := 1$ Given. $N_1 := 2.01205$ $N_2 := .90787$ $N_3 := .62203$

$N_4 := 1.54950$ $N_5 := 1.27852$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

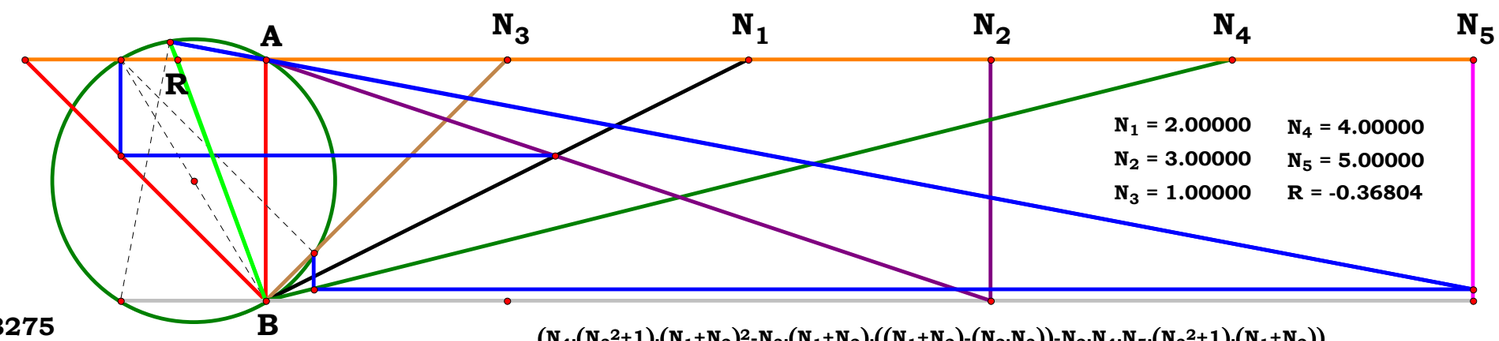
$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad GJ := \frac{BJ}{N_4}$$

$$BM := \frac{N_5}{AB - GJ} \qquad AM := \sqrt{AB^2 + BM^2}$$

$$FM := \frac{BM \cdot (BM + AD)}{AM} \qquad AF := AM - FM$$

$$EF := \frac{BM \cdot AF}{AM} \qquad AE := \frac{AF}{AM} \qquad R := \frac{EF}{AB - AE} \qquad R = 0.243275$$



$$\frac{(N_4 \cdot (N_3{}^2+1) \cdot (N_1+N_2)^2 - N_3 \cdot (N_1+N_2) \cdot ((N_1+N_2) - (N_2 \cdot N_3)) - N_2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2+1) \cdot (N_1+N_2))}{((N_4 \cdot N_5 \cdot (N_3{}^2+1) \cdot (N_1+N_2)^2 + N_2 \cdot N_4 \cdot (N_3{}^2+1) \cdot (N_1+N_2)) - N_2 \cdot N_3 \cdot ((N_1+N_2) - (N_2 \cdot N_3)))} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot (N_3{}^2 + 1) \cdot (N_1 + N_2)^2 - N_3 \cdot (N_1 + N_2) \cdot (N_1 + N_2 - N_2 \cdot N_3) - N_5 \cdot N_2 \cdot N_4 \cdot (N_3{}^2 + 1) \cdot (N_1 + N_2)}{N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3{}^2 + 1) + N_4 \cdot N_2 \cdot (N_3{}^2 + 1) \cdot (N_1 + N_2) - N_2 \cdot N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

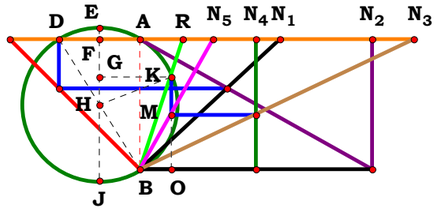
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{(A+B) \cdot \left[E \cdot \left[C^2 \cdot (A+B) + N_u{}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + A \cdot D \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right]}{E \cdot A \cdot \left[C^2 \cdot (A+B) + N_u{}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + A \cdot D \cdot N_u\right] + N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A+B)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{(V \cdot m + W \cdot l) \cdot \left[Y \cdot \left(X^2 + n^2\right) \cdot (V \cdot m \cdot p - W \cdot Z \cdot l + W \cdot l \cdot p) + X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot m \cdot n - W \cdot l \cdot n)\right]}{Y \cdot \left(X^2 + n^2\right) \cdot (V \cdot m + W \cdot l) \cdot (V \cdot Z \cdot m + W \cdot Z \cdot l + W \cdot l \cdot p) + W \cdot X \cdot l \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot m \cdot n - W \cdot l \cdot n)} = 0$$

4RST4AB4R3



$N_1 = 1.07253$
$N_2 = 1.77959$
$N_3 = 2.10395$
$N_4 = 0.89086$
$N_5 = 0.56178$
$R = 0.33403$

Unit. $AB := 1$ **Given.** $N_1 := 1.07253$ $N_2 := 1.77959$ $N_3 := 2.10395$ $N_4 := .89086$ $N_5 := .56178$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

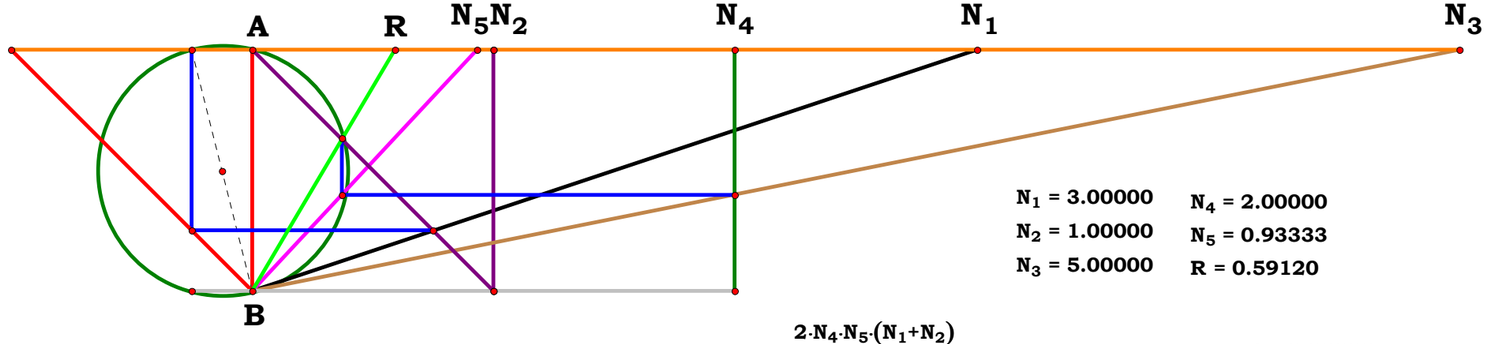
Descriptions.

$AD := \frac{N_2}{N_1 + N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$GK := \frac{AD}{2} + BO$ $EJ := \sqrt{AB^2 + AD^2}$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - GK^2}$ $EF := \frac{EJ - AB}{2}$

$KO := \frac{EJ}{2} + GH - EF$ $R := \frac{BO}{KO}$ $R = 0.334028$



$N_1 = 3.00000$ $N_4 = 2.00000$
$N_2 = 1.00000$ $N_5 = 0.93333$
$N_3 = 5.00000$ $R = 0.59120$

$$\frac{2 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2) + \sqrt{(N_3 \cdot (N_1 + N_2))^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_4 \cdot N_5 \cdot (N_1 + N_2)) \cdot (N_1 + N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{N_3^2 \cdot (N_1 + N_2)^2}}{N_3 \cdot \sqrt{N_3^2 \cdot (N_1 + N_2)^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot [N_2 \cdot N_3 + N_4 \cdot N_5 \cdot (N_1 + N_2)]} + N_3 \cdot \sqrt{N_3^2 \cdot (N_1 + N_2)^2}} = 0$$

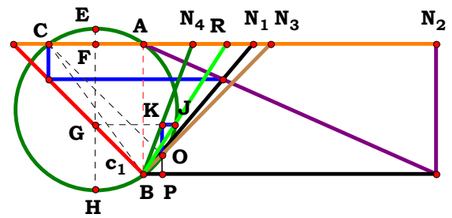
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot (A + B)}{\sqrt{[D^2 \cdot E^2 \cdot (A + B) - 4 \cdot C \cdot N_u \cdot [C \cdot N_u \cdot (A + B) + A \cdot D \cdot E]] \cdot (A + B)} + D \cdot E \cdot (A + B)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot n}{\sqrt{[(V \cdot m + W \cdot l) \cdot [X \cdot o \cdot p \cdot (V \cdot X \cdot m \cdot o \cdot p - 4 \cdot W \cdot Y \cdot Z \cdot l \cdot n + W \cdot X \cdot l \cdot o \cdot p) - 4 \cdot Y^2 \cdot Z^2 \cdot n^2 \cdot (V \cdot m + W \cdot l)]] + X \cdot o \cdot p \cdot (V \cdot m + W \cdot l)} = 0$$

4RST4AB4R4



$N_1 = 0.84007$
$N_2 = 2.24451$
$N_3 = 0.98040$
$N_4 = 0.37752$
$R = 0.63945$

Unit. $AB := 1$ Given. $N_1 := .84007$ $N_2 := 2.24451$ $N_3 := .98040$ $N_4 := .37752$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

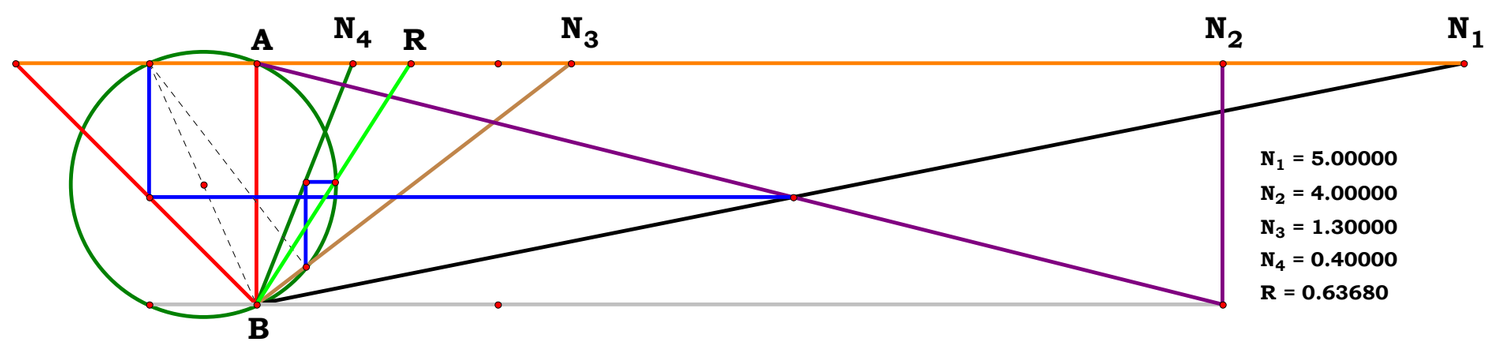
$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$

$BN_3 := \sqrt{AB^2 + N_3^2}$ $ON_3 := \frac{N_3 \cdot (N_3 + AC)}{BN_3}$

$BO := BN_3 - ON_3$ $BP := \frac{N_3 \cdot BO}{BN_3}$ $KP := \frac{BP}{N_4}$

$GH := KP + EF$ $EG := EH - GH$

$GP := \sqrt{EG \cdot GH}$ $R := \frac{GP - \frac{AC}{2}}{KP}$ $R = 0.63945$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 1.30000$
$N_4 = 0.40000$
$R = 0.63680$

$$\frac{(N_1+N_2)\cdot\left(\sqrt{((N_2\cdot N_4)\cdot(N_3^2+1))^2+4\cdot N_3\cdot((N_1+N_2)-(N_2\cdot N_3))\cdot(N_4\cdot(N_3^2+1)\cdot(N_1+N_2)-N_3\cdot((N_1+N_2)-(N_2\cdot N_3)))}-(N_2\cdot N_4)-N_2\cdot N_3^2\cdot N_4\right)}{2\cdot N_3\cdot(N_1+N_2)\cdot((N_1+N_2)-(N_2\cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4^2}\cdot AC\cdot N_4\cdot\left(N_3^2+1\right) - N_4\cdot\sqrt{N_3\cdot N_4\cdot\left[AC\cdot N_3\cdot\left(2\cdot AC\cdot N_4 - 4\cdot N_3^2 + AC\cdot N_3^2\cdot N_4 - 4\right) + 4\cdot N_3^2 + 4\right] + 4\cdot N_3^2\cdot\left[AC\cdot N_3\cdot\left(2 - AC\cdot N_3\right) - 1\right] + AC^2\cdot N_4^2}}{2\cdot\sqrt{N_4^2}\cdot N_3\cdot\left(AC\cdot N_3 - 1\right)} = 0$$

$$R - \frac{\sqrt{N_2^2\cdot N_4^2\cdot\left(N_3^2+1\right)^2 - 4\cdot N_3^2\cdot\left(N_1+N_2-N_2\cdot N_3\right)^2 + 4\cdot N_3\cdot N_4\cdot\left(N_1+N_2\right)\cdot\left(N_3^2+1\right)\cdot\left(N_1+N_2-N_2\cdot N_3\right)} - N_2\cdot N_4\cdot\left(N_3^2+1\right)}{2\cdot N_3\cdot\left(N_1+N_2-N_2\cdot N_3\right)} = 0$$

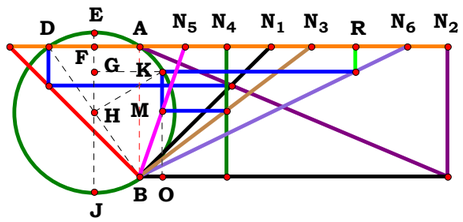
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2\cdot\left(C^2+N_u^2\right)^2 + 4\cdot D\cdot\left[C\cdot(A+B) - A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2 - D\cdot(A+B)\cdot C + (A+B)\cdot N_u^2 + A\cdot D\cdot N_u\right]} - A\cdot\left(C^2+N_u^2\right)}{2\cdot D\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2\cdot X^2\cdot m^2\cdot\left(Y^2+o^2\right)^2 + 4\cdot Z\cdot Y\cdot p\cdot\left(Y^2+o^2\right)\cdot(W\cdot n + X\cdot m)\cdot(W\cdot n\cdot o - X\cdot Y\cdot m + X\cdot m\cdot o) - 4\cdot Y^2\cdot p^2\cdot(W\cdot n\cdot o - X\cdot Y\cdot m + X\cdot m\cdot o)^2} - X\cdot Z\cdot m\cdot\left(Y^2+o^2\right)}{2\cdot Y\cdot p\cdot(W\cdot n\cdot o - X\cdot Y\cdot m + X\cdot m\cdot o)} = 0$$

4RST4AB4R5



$N_1 = 1.00473$ $N_5 = 0.34869$
$N_2 = 2.36074$ $N_6 = 2.05339$
$N_3 = 1.31704$ $R = 1.65618$
$N_4 = 0.67045$

Unit. $AB := 1$ Given. $N_1 := 1.00473$ $N_2 := 2.36074$ $N_3 := 1.31704$

$N_4 := .67045$ $N_5 := .34869$ $N_6 := 2.05339$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

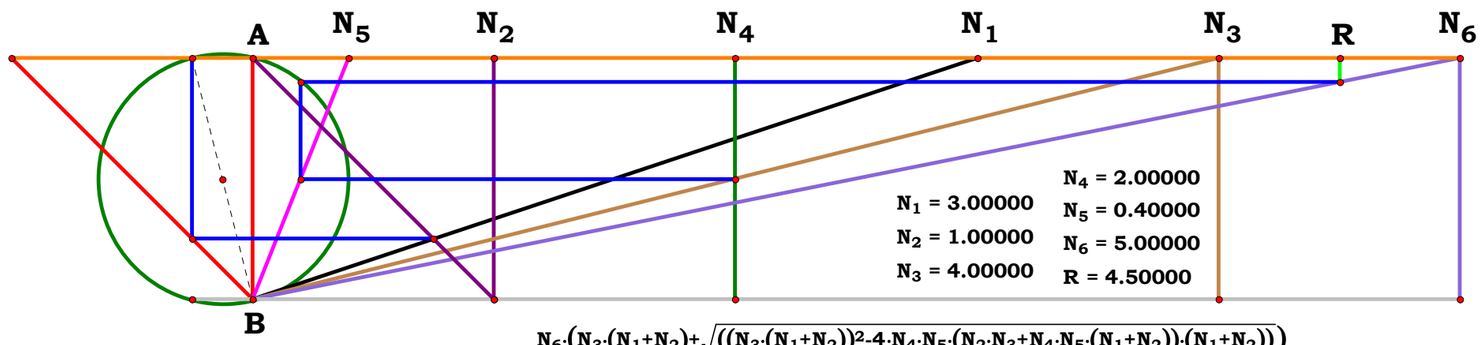
$AD := \frac{N_2}{N_1 + N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$FK := BO + \frac{AD}{2}$ $EJ := \sqrt{AD^2 + AB^2}$ $HK := \frac{EJ}{2}$

$FH := \sqrt{HK^2 - FK^2}$ $EF := \frac{EJ - AB}{2}$

$KO := HK + FH - EF$ $R := N_6 \cdot KO$ $R = 1.656189$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$$\frac{N_6 \cdot \left(N_3 \cdot (N_1 + N_2) + \sqrt{\left((N_3 \cdot (N_1 + N_2))^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 + N_4 \cdot N_5 \cdot (N_1 + N_2)) \cdot (N_1 + N_2)\right)}\right)}{2 \cdot N_3 \cdot (N_1 + N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_3^2 \cdot (N_1 + N_2)^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_2 \cdot N_3 + N_1 \cdot N_4 \cdot N_5 + N_2 \cdot N_4 \cdot N_5)}\right] + N_3 \cdot (N_1 + N_2)}{2 \cdot N_3 \cdot (N_1 + N_2)} = 0$$

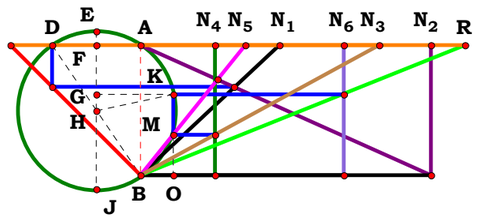
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A + B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A + B) + A \cdot D \cdot E\right]\right] \cdot (A + B)} + D \cdot E \cdot (A + B)\right]}{2 \cdot F \cdot (A + B) \cdot D \cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{\left[(U \cdot l + V \cdot k) \cdot \left[W^2 \cdot n^2 \cdot o^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot X \cdot Y \cdot m \cdot (U \cdot X \cdot Y \cdot l \cdot m + V \cdot X \cdot Y \cdot k \cdot m + V \cdot W \cdot k \cdot n \cdot o)\right]\right] + W \cdot n \cdot o \cdot (U \cdot l + V \cdot k)\right]}{2 \cdot W \cdot p \cdot (U \cdot l + V \cdot k) \cdot n \cdot o} = 0$$

4RST4AB4R6



$N_1 = 1.06284$
$N_2 = 2.22514$
$N_3 = 1.83038$
$N_4 = 0.57360$
$N_5 = 0.80392$
$N_6 = 1.55941$
$R = 2.48850$

Unit. $AB := 1$ **Given.** $N_1 := 1.06284$ $N_2 := 2.22514$ $N_3 := 1.83038$

$N_4 := .57360$ $N_5 := .80392$ $N_6 := 1.55941$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

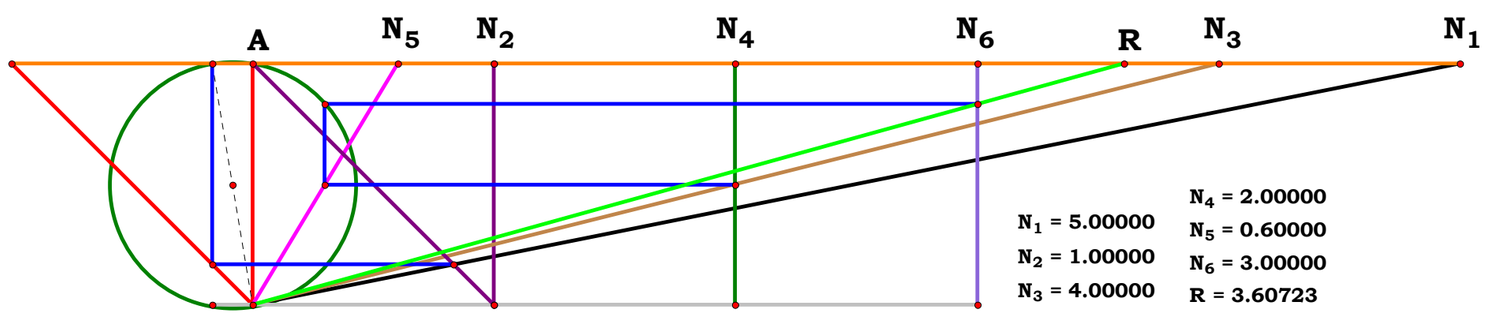
Descriptions.

$AD := \frac{N_2}{N_1 + N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$EJ := \sqrt{AD^2 + AB^2}$ $EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$

$GK := \frac{AD}{2} + BO$ $GH := \sqrt{HK^2 - GK^2}$

$KO := HK + GH - EF$ $R := \frac{N_6}{KO}$ $R = 2.488535$



$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$N_5 = 0.60000$
$N_6 = 3.00000$
$R = 3.60723$

Definitions.

$$R - \frac{2 \cdot N_3 \cdot N_6 \cdot (N_1 + N_2)}{\sqrt{(N_1 + N_2)^2 \cdot (N_3^2 - 4 \cdot N_4^2 \cdot N_5^2) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)} + N_3 \cdot (N_1 + N_2)} = 0$$

$$\frac{2 \cdot N_3 \cdot N_6 \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2) + \sqrt{(N_1 + N_2)^2 \cdot (N_3^2 - 4 \cdot N_4^2 \cdot N_5^2) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)}} - R = 0.00000$$

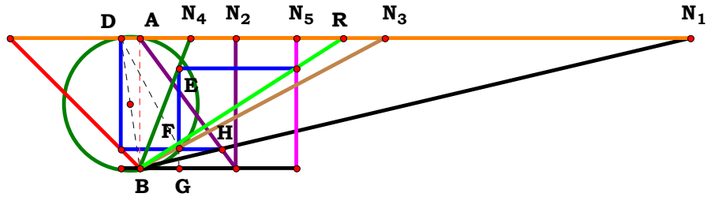
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot (A + B) \cdot D \cdot E}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A + B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A + B) + A \cdot D \cdot E\right]\right] \cdot (A + B)} + D \cdot E \cdot (A + B)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot W \cdot Z \cdot (U \cdot l + V \cdot k) \cdot n \cdot o}{p \cdot \left[\sqrt{\left[(U \cdot l + V \cdot k) \cdot \left[W^2 \cdot n^2 \cdot o^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot X \cdot Y \cdot m \cdot [U \cdot X \cdot Y \cdot l \cdot m + V \cdot k \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)]\right]\right] + W \cdot n \cdot o \cdot (U \cdot l + V \cdot k)\right]} = 0$$

4RST4AB4R7



$N_1 = 4.22041$
$N_2 = 0.73353$
$N_3 = 1.88118$
$N_4 = 0.38720$
$N_5 = 1.20104$
$R = 1.55525$

Unit. $AB := 1$ Given. $N_1 := 4.22041$ $N_2 := .73353$ $N_3 := 1.88118$

$N_4 := .38720$ $N_5 := 1.20104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2}$$

$$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BF := BN_3 - FN_3$$

$$BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{BG}{N_4} \qquad R := \frac{N_5}{EG} \qquad R = 1.555245$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

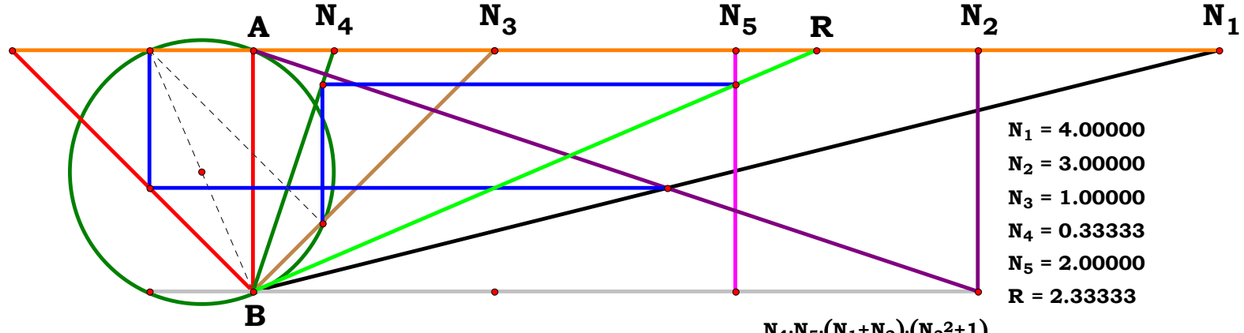
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u{}^2) \cdot (A + B)}{D \cdot E \cdot [C \cdot (A + B) - A \cdot N_u]} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

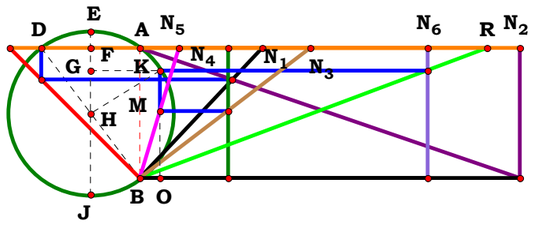
$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{o \cdot p \cdot (V \cdot X \cdot m \cdot n - W \cdot X^2 \cdot l + W \cdot X \cdot l \cdot n)} = 0$$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.33333$
$N_5 = 2.00000$
$R = 2.33333$

$$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_3 \cdot (N_1 + N_2) - N_2 \cdot N_3} - R = 0.00000$$

4RST4AB4R8



$N_1 = 0.93693$
$N_2 = 2.91283$
$N_3 = 1.30735$
$N_4 = 0.68014$
$N_5 = 0.30026$
$N_6 = 2.20836$
$R = 2.66796$

Unit. $AB := 1$ **Given.** $N_1 := .93693$ $N_2 := 2.91283$ $N_3 := 1.30735$ $N_4 := .68014$ $N_5 := .30026$ $N_6 := 2.20836$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

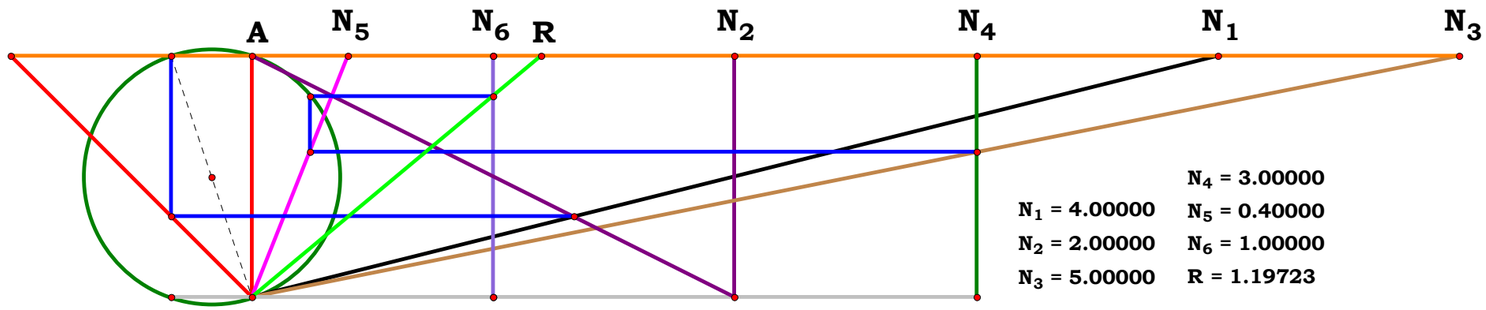
$$AD := \frac{N_2}{N_1 + N_2} \qquad EJ := \sqrt{AD^2 + AB^2} \qquad EF := \frac{EJ - AB}{2}$$

$$MO := \frac{N_4}{N_3} \qquad BO := N_5 \cdot MO \qquad GK := BO + \frac{AD}{2}$$

$$HK := \frac{EJ}{2} \qquad GH := \sqrt{HK^2 - GK^2}$$

$$KO := HK + GH - EF \qquad R := \frac{N_6}{KO}$$

$R = 2.667968$



$N_1 = 4.00000$ $N_4 = 3.00000$
$N_2 = 2.00000$ $N_5 = 0.40000$
$N_3 = 5.00000$ $N_6 = 1.00000$
$R = 1.19723$

Definitions.

$$R - \frac{2 \cdot N_3 \cdot N_6 \cdot (N_1 + N_2)}{\sqrt{(N_1 + N_2)^2 \cdot (N_3^2 - 4 \cdot N_4^2 \cdot N_5^2) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)} + N_3 \cdot (N_1 + N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{2 \cdot N_u \cdot (A + B) \cdot D \cdot E}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A + B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A + B) + A \cdot D \cdot E\right]\right]} \cdot (A + B) + D \cdot E \cdot (A + B)\right]} = 0$$

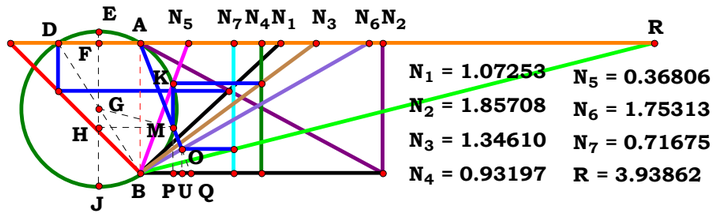
$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{2 \cdot W \cdot Z \cdot (U \cdot l + V \cdot k) \cdot n \cdot o}{p \cdot \left[\sqrt{\left[(U \cdot l + V \cdot k) \cdot \left[W^2 \cdot n^2 \cdot o^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot X \cdot Y \cdot m \cdot [U \cdot X \cdot Y \cdot l \cdot m + V \cdot k \cdot (X \cdot Y \cdot m + W \cdot n \cdot o)]\right]\right]} + W \cdot n \cdot o \cdot (U \cdot l + V \cdot k)\right]} = 0$$

B

$$\frac{2 \cdot N_3 \cdot N_6 \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2) + \sqrt{(N_1 + N_2)^2 \cdot (N_3^2 - 4 \cdot N_4^2 \cdot N_5^2) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)}} - R = 0.00000$$

4RST4AB4R10



$N_1 = 1.07253$ $N_5 = 0.36806$
$N_2 = 1.85708$ $N_6 = 1.75313$
$N_3 = 1.34610$ $N_7 = 0.71675$
$N_4 = 0.93197$ $R = 3.93862$

Unit. $AB := 1$ **Given.** $N_1 := 1.07253$ $N_2 := 1.85708$ $N_3 := 1.34610$ $N_4 := .93197$ $N_5 := .36806$ $N_6 := 1.75313$ $N_7 := .71675$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AD := \frac{N_2}{N_1 + N_2}$ $BP := N_5 \cdot \frac{N_4}{N_3}$ $EJ := \sqrt{AD^2 + AB^2}$

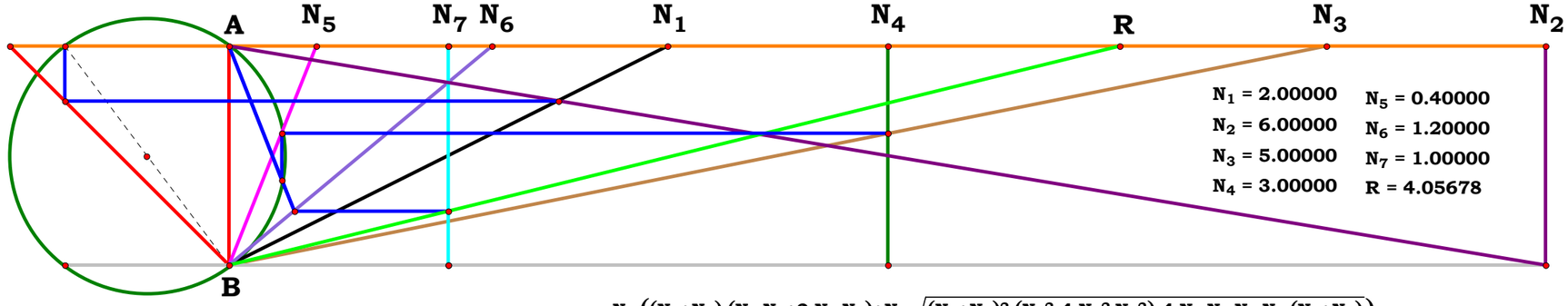
$EF := \frac{EJ - AB}{2}$ $GM := \frac{EJ}{2}$

$HM := \frac{AD}{2} + BP$ $GH := \sqrt{GM^2 - HM^2}$

$FH := GM + GH - EF$ $BQ := \frac{BP}{FH}$

$BU := \frac{N_6 \cdot BQ}{N_6 + BQ}$ $OU := \frac{BU}{N_6}$

$R := \frac{N_7}{OU}$ $R = 3.938664$



$N_1 = 2.00000$ $N_5 = 0.40000$
$N_2 = 6.00000$ $N_6 = 1.20000$
$N_3 = 5.00000$ $N_7 = 1.00000$
$N_4 = 3.00000$ $R = 4.05678$

$\frac{N_7 \cdot ((N_1+N_2) \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) + N_6 \cdot \sqrt{(N_1+N_2)^2 \cdot (N_3^2 - 4 \cdot N_4^2 \cdot N_5^2) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_1+N_2)})}{2 \cdot N_4 \cdot N_5 \cdot (N_1+N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_7 \cdot \left[N_6 \cdot \sqrt{\left(N_1+N_2\right)^2 \cdot \left(N_3^2 - 4 \cdot N_4^2 \cdot N_5^2\right) - 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot \left(N_1+N_2\right)} + \left(N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5\right) \cdot \left(N_1+N_2\right) \right]}{2 \cdot N_4 \cdot N_5 \cdot \left(N_1+N_2\right)} = 0$$

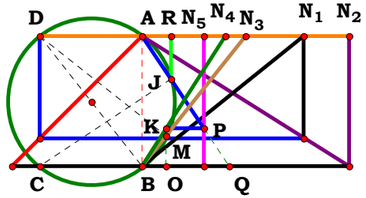
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E \right] \right] \cdot (A+B)} + (2 \cdot C \cdot F + D \cdot E) \cdot (A+B) \right]}{2 \cdot C \cdot F \cdot G \cdot (A+B)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{N_u \cdot \left[N_u \cdot \sqrt{\left[(T \cdot k + U \cdot j) \cdot \left[V \cdot m \cdot n \cdot (T \cdot V \cdot k \cdot m \cdot n - 4 \cdot U \cdot W \cdot X \cdot j \cdot l + U \cdot V \cdot j \cdot m \cdot n) - 4 \cdot W^2 \cdot X^2 \cdot l^2 \cdot (T \cdot k + U \cdot j) \right] \right]} + (T \cdot k + U \cdot j) \cdot \left(2 \cdot F \cdot W \cdot X \cdot l + N_u \cdot V \cdot m \cdot n \right) \right]}{2 \cdot F \cdot G \cdot W \cdot X \cdot l \cdot (T \cdot k + U \cdot j)} = 0$$

4RST4AB5R0



$N_1 = 1.23719$
$N_2 = 1.58588$
$N_3 = 0.79637$
$N_4 = 0.63903$
$N_5 = 0.47460$
$R = 0.22134$

Unit. $AB := 1$ **Given.** $N_1 := 1.23719$ $N_2 := 1.58588$ $N_3 := .79637$ $N_4 := .63903$ $N_5 := .47460$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

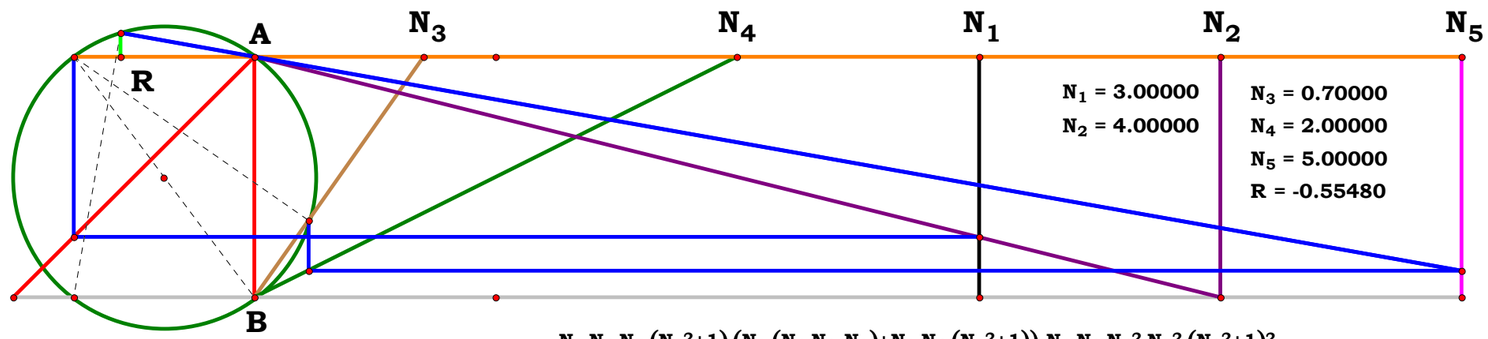
$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BM := BN_3 - MN_3$

$BO := \frac{N_3 \cdot BM}{BN_3}$ $KO := \frac{BO}{N_4}$ $BQ := \frac{N_5}{AB - KO}$

$AQ := \sqrt{AB^2 + BQ^2}$ $JQ := \frac{BQ \cdot (BQ + AD)}{AQ}$

$AJ := AQ - JQ$ $R := \frac{BQ \cdot AJ}{AQ}$ $R = 0.221344$



$$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_3 \cdot (N_1 \cdot N_3 - N_2) + N_2 \cdot N_4 \cdot (N_3^2+1)) - N_1 \cdot N_2 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2+1)^2}{(N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1))^2 + ((N_1 \cdot N_3^2 - N_2 \cdot N_3) + N_2 \cdot N_4 + N_2 \cdot N_3^2 \cdot N_4)^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) \cdot \left[N_3 \cdot \left(N_1 \cdot N_3 - N_2\right) + N_2 \cdot N_4 \cdot \left(N_3^2 + 1\right)\right] - N_1 \cdot N_2 \cdot N_4^2 \cdot N_5^2 \cdot \left(N_3^2 + 1\right)^2}{N_2^2 \cdot N_4^2 \cdot N_5^2 \cdot \left(N_3^2 + 1\right)^2 + \left(N_1 \cdot N_3^2 - N_2 \cdot N_3 + N_2 \cdot N_4 + N_2 \cdot N_3^2 \cdot N_4\right)^2} = 0$$

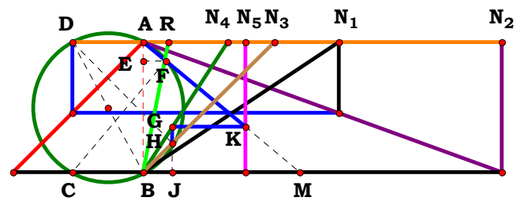
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot A \cdot \left[A \cdot C \cdot E \cdot (C - D) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{E^2 \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right) \cdot \left[Y \cdot \left(X^2 + n^2\right) \cdot (W \cdot l \cdot p - V \cdot Z \cdot m) + X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)\right]}{Y^2 \cdot W^2 \cdot l^2 \cdot \left(X^2 + n^2\right)^2 \cdot \left(Z^2 + p^2\right) + 2 \cdot Y \cdot W \cdot X \cdot l \cdot o \cdot p^2 \cdot \left(X^2 + n^2\right) \cdot (V \cdot X \cdot m - W \cdot l \cdot n) + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot l \cdot n)^2} = 0$$

4RST4AB5R2



$N_1 = 1.49870$
$N_2 = 2.74817$
$N_3 = 1.00946$
$N_4 = 0.64872$
$N_5 = 0.78455$
$R = 0.19783$

Unit. $AB := 1$ Given. $N_1 := 1.49870$ $N_2 := 2.74817$ $N_3 := 1.00946$ $N_4 := .64872$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .78455$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

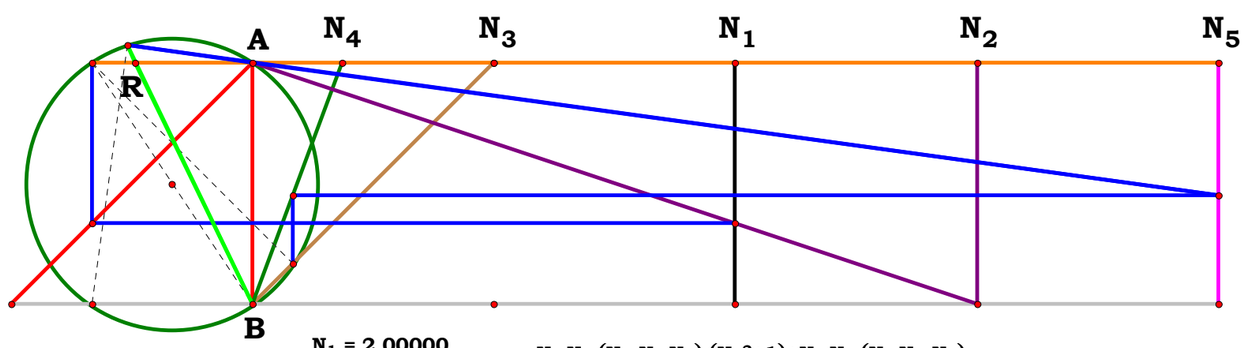
$$AD := \frac{N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad GJ := \frac{BJ}{N_4}$$

$$BM := \frac{N_5}{AB - GJ} \qquad AM := \sqrt{AB^2 + BM^2}$$

$$FM := \frac{BM \cdot (BM + AD)}{AM} \qquad AF := AM - FM \qquad EF := \frac{BM \cdot AF}{AM}$$

$$AE := \frac{AF}{AM} \qquad R := \frac{EF}{AB - AE} \qquad R = 0.197829$$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.37128$
$N_5 = 4.00000$
$R = -0.48440$

$$\frac{N_2 \cdot N_4 \cdot (N_2 - N_1 \cdot N_5) \cdot (N_3^2 + 1) + N_2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)}{N_2 \cdot N_4 \cdot (N_1 + N_2 \cdot N_5) \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot (N_2 - N_1 \cdot N_5) \cdot (N_3^2 + 1) + N_2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)}{N_2 \cdot N_4 \cdot (N_1 + N_2 \cdot N_5) \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)} = 0$$

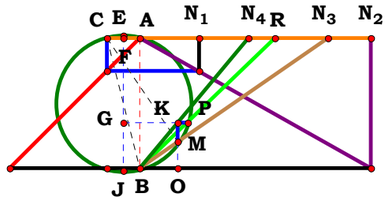
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot [E \cdot [A \cdot C \cdot (C - D) + N_u \cdot (B \cdot D + A \cdot N_u)] - [B \cdot N_u \cdot (C^2 + N_u^2)]]}{E \cdot B \cdot [A \cdot C \cdot (C - D) + N_u \cdot (B \cdot D + A \cdot N_u)] + A^2 \cdot N_u \cdot (C^2 + N_u^2)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Y \cdot l \cdot (W \cdot l \cdot p - V \cdot Z \cdot m) \cdot (X^2 + n^2) + W \cdot X \cdot l \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)}{Y \cdot W \cdot l \cdot (X^2 + n^2) \cdot (W \cdot Z \cdot l + V \cdot m \cdot p) + V \cdot X \cdot m \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)} = 0$$

4RST4AB5R4



$N_1 = 0.45264$
$N_2 = 1.76991$
$N_3 = 1.44532$
$N_4 = 0.83275$
$R = 1.03672$

Unit. $AB := 1$ Given. $N_1 := .45264$ $N_2 := 1.76991$ $N_3 := 1.44532$ $N_4 := .83275$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

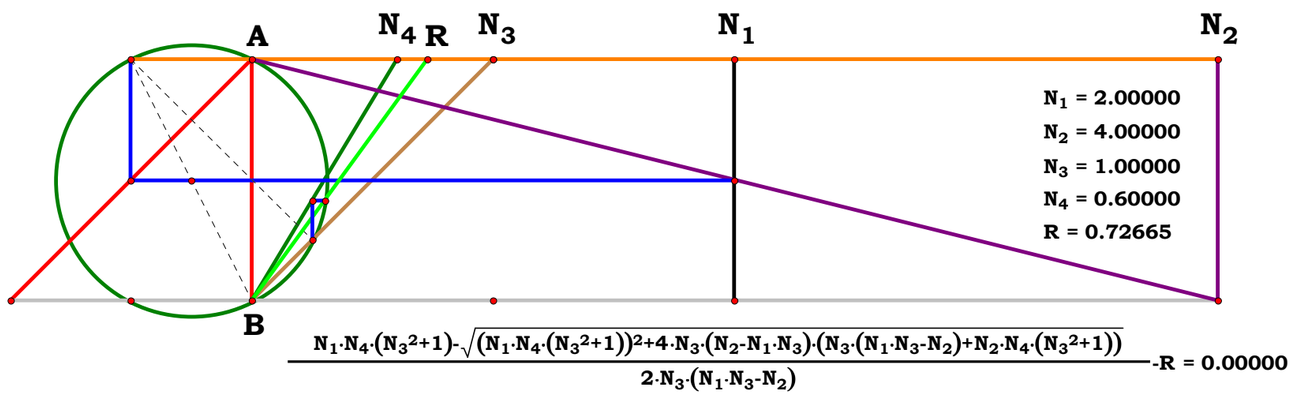
$AD := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AD^2}$ $EF := \frac{EJ - AB}{2}$

$BN_3 := \sqrt{AB^2 + N_3^2}$ $MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BM := BN_3 - MN_3$ $BO := \frac{N_3 \cdot BM}{BN_3}$ $KO := \frac{BO}{N_4}$

$GJ := KO + EF$ $EG := EJ - GJ$ $GP := \sqrt{EG \cdot GJ}$

$R := \frac{GP - \frac{AD}{2}}{KO}$ $R = 1.03672$



$$\frac{N_1 \cdot N_4 \cdot (N_3^2+1) - \sqrt{(N_1 \cdot N_4 \cdot (N_3^2+1))^2 + 4 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_3 \cdot (N_1 \cdot N_3 - N_2) + N_2 \cdot N_4 \cdot (N_3^2+1))}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4^2} \cdot AD \cdot N_4 \cdot (N_3^2 + 1) - N_4 \cdot \sqrt{N_3 \cdot N_4 \cdot \left[AD \cdot N_3 \cdot \left(2 \cdot AD \cdot N_4 - 4 \cdot N_3^2 + AD \cdot N_3^2 \cdot N_4 - 4\right) + 4 \cdot N_3^2 + 4\right] + 4 \cdot N_3^2 \cdot \left[AD \cdot N_3 \cdot (2 - AD \cdot N_3) - 1\right] + AD^2 \cdot N_4^2}}{2 \cdot \sqrt{N_4^2} \cdot N_3 \cdot (AD \cdot N_3 - 1)} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot (N_3^2 + 1) - \sqrt{N_1^2 \cdot N_4^2 \cdot (N_3^2 + 1)^2 + 4 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot \left[N_3 \cdot (N_1 \cdot N_3 - N_2) + N_2 \cdot N_4 \cdot (N_3^2 + 1)\right]}}{2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)} = 0$$

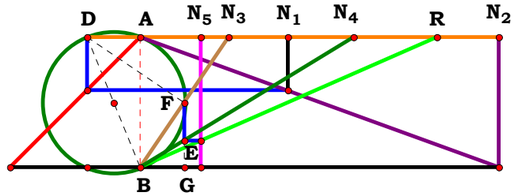
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{4 \cdot D \cdot (A \cdot C - B \cdot N_u) \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot (B \cdot D + A \cdot N_u)\right] + B^2 \cdot (C^2 + N_u^2)^2} - B \cdot (C^2 + N_u^2)}{2 \cdot D \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Z \cdot n \cdot (Y^2 + o^2) - \sqrt{Z^2 \cdot W^2 \cdot n^2 \cdot (Y^2 + o^2)^2 + -4 \cdot Z \cdot X \cdot Y \cdot m \cdot p \cdot (Y^2 + o^2) \cdot (W \cdot Y \cdot n - X \cdot m \cdot o) - 4 \cdot Y^2 \cdot p^2 \cdot (W \cdot Y \cdot n - X \cdot m \cdot o)^2}}{2 \cdot Y \cdot p \cdot (W \cdot Y \cdot n - X \cdot m \cdot o)} = 0$$

4RST4AB5R7



$N_1 = 1.13064$
$N_2 = 2.74817$
$N_3 = 0.68014$
$N_4 = 1.63667$
$N_5 = 0.46492$
$R = 2.27207$

Unit. $AB := 1$ Given. $N_1 := 1.13064$ $N_2 := 2.74817$ $N_3 := .68014$ $N_4 := 1.63667$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .46492$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{BG}{N_4}$

$R := \frac{N_5}{EG}$ $R = 2.272076$

Definitions.

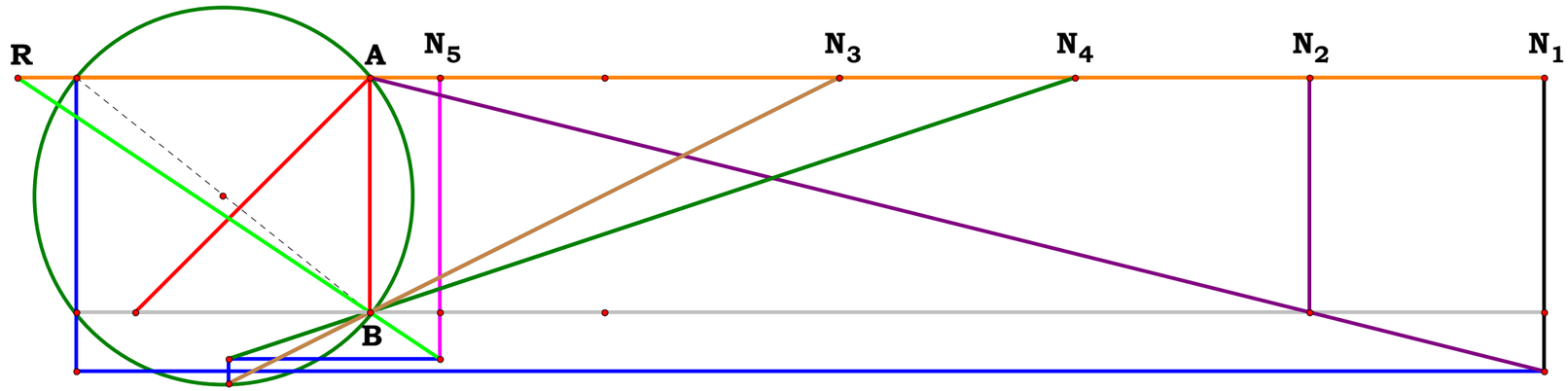
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [D \cdot (A \cdot C - B \cdot N_u)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

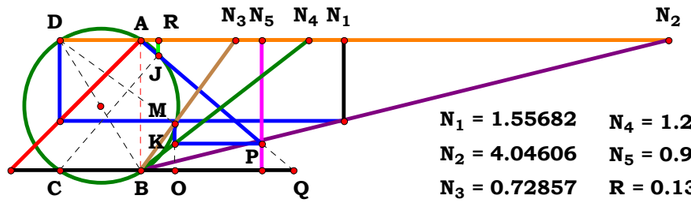
$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (N_3^2 + 1)}{o \cdot p \cdot N_3 \cdot (W \cdot l - N_3 \cdot V \cdot m)} = 0$$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$N_5 = 0.30000$
$R = -1.50000$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$

4RST4AB6R0



$N_1 = 1.55682$ $N_4 = 1.28798$
$N_2 = 4.04606$ $N_5 = 0.92984$
$N_3 = 0.72857$ $R = 0.13904$

Unit. $AB := 1$ Given. $N_1 := 1.55682$ $N_2 := 4.04606$ $N_3 := .72857$ $N_4 := 1.28798$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .92984$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

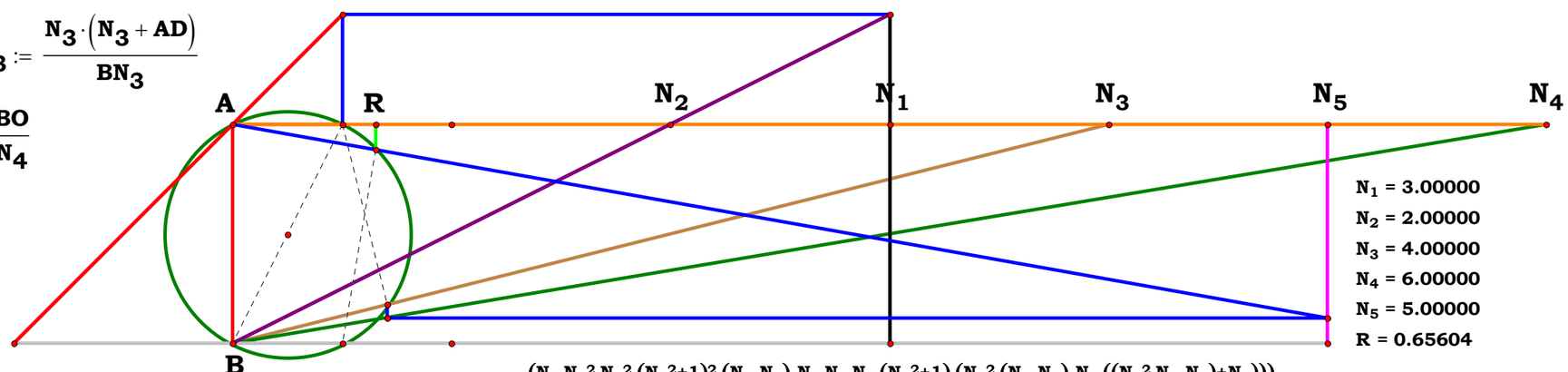
$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BM := BN_3 - MN_3 \qquad BO := \frac{N_3 \cdot BM}{BN_3} \qquad KO := \frac{BO}{N_4}$$

$$BQ := \frac{N_5}{AB - KO} \qquad AQ := \sqrt{AB^2 + BQ^2}$$

$$JQ := \frac{BQ \cdot (BQ + AD)}{AQ} \qquad AJ := AQ - JQ$$

$$R := \frac{BQ \cdot AJ}{AQ} \qquad R = 0.139036$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 6.00000$
$N_5 = 5.00000$
$R = 0.65604$

$$\frac{(N_2 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2+1)^2 \cdot (N_1-N_2) - N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_3^2 \cdot (N_1-N_2) - N_2 \cdot ((N_3^2 \cdot N_4 - N_3) + N_4)))}{(((N_2 \cdot N_4 \cdot (N_3^2+1))^2 \cdot (N_5^2+1) - 2 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)) + N_3^2 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_4^2 \cdot N_5^2 \cdot \left(N_3^2 + 1\right)^2 \cdot \left(N_1 - N_2\right) - N_2 \cdot N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) \cdot \left[N_3^2 \cdot \left(N_1 - N_2\right) - N_2 \cdot \left(N_3^2 \cdot N_4 - N_3 + N_4\right)\right]}{N_2^2 \cdot N_4^2 \cdot \left(N_3^2 + 1\right)^2 \cdot \left(N_5^2 + 1\right) - 2 \cdot N_2 \cdot N_3 \cdot N_4 \cdot \left(N_3^2 + 1\right) \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right) + N_3^2 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)^2} = 0$$

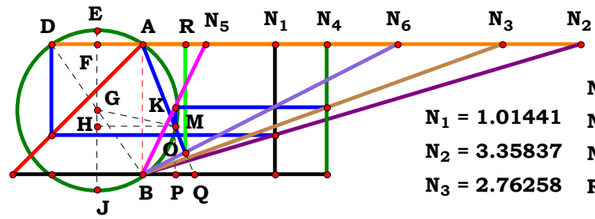
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]}{E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right) \cdot \left[Y \cdot \left(X^2 + n^2\right) \cdot (V \cdot Z \cdot m - W \cdot Z \cdot l + W \cdot l \cdot p) - X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)\right]}{Y^2 \cdot W^2 \cdot l^2 \cdot \left(X^2 + n^2\right)^2 \cdot \left(Z^2 + p^2\right) - 2 \cdot Y \cdot W \cdot X \cdot l \cdot o \cdot p^2 \cdot \left(X^2 + n^2\right) \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n) + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)^2} = 0$$

4RST4AB6R1



$N_1 = 1.01441$ $N_4 = 1.41390$
$N_2 = 3.35837$ $N_5 = 0.48429$
$N_3 = 2.76258$ $N_6 = 1.95653$
$R = 0.32983$

Unit. $AB := 1$ **Given.** $N_1 := 1.01441$ $N_2 := 3.35837$ $N_3 := 2.76258$ $N_4 := 1.41390$ $N_5 := .48429$ $N_6 := 1.95653$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

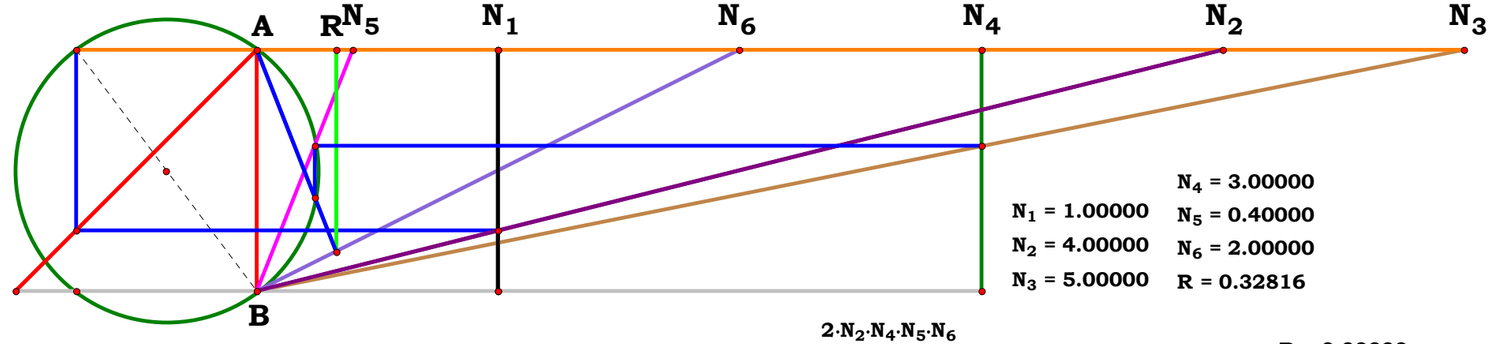
$AD := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AD^2}$ $AF := \frac{AD}{2}$

$BP := N_5 \cdot \frac{N_4}{N_3}$ $HM := AF + BP$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - HM^2}$ $FH := \frac{AB}{2} + GH$

$BQ := \frac{HM - AF}{FH}$ $R := \frac{BQ \cdot N_6}{BQ + N_6}$

$R = 0.329837$



$N_1 = 1.00000$ $N_4 = 3.00000$
$N_2 = 4.00000$ $N_5 = 0.40000$
$N_3 = 5.00000$ $N_6 = 2.00000$
$R = 0.32816$

$$\frac{2 \cdot N_2 \cdot N_4 \cdot N_5 \cdot N_6}{N_2 \cdot N_3 \cdot N_6 + 2 \cdot N_2 \cdot N_4 \cdot N_5 + N_6 \cdot \sqrt{(N_2 \cdot N_3)^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_4 \cdot N_5 \cdot N_6}{N_6 \cdot \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)} + N_2 \cdot N_3 \cdot N_6 + 2 \cdot N_2 \cdot N_4 \cdot N_5} = 0$$

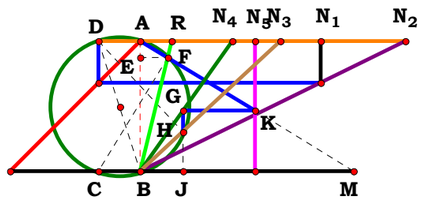
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot [A \cdot C \cdot N_u + D \cdot E \cdot (A - B)]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot V \cdot X \cdot Y \cdot Z \cdot m \cdot \sqrt{k}}{Z \cdot \sqrt{V^2 \cdot k \cdot (W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2) + 4 \cdot W \cdot V \cdot X \cdot Y \cdot m \cdot n \cdot o \cdot (U \cdot l - V \cdot k)} + \sqrt{k} \cdot V \cdot (W \cdot Z \cdot n \cdot o + 2 \cdot X \cdot Y \cdot m \cdot p)} = 0$$

4RST4AB6R2



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.07726$
$N_4 = 0.70683$
$N_5 = 0.88141$
$R = 0.24288$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.07726$ $N_4 := .70683$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $N_5 := .88141$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

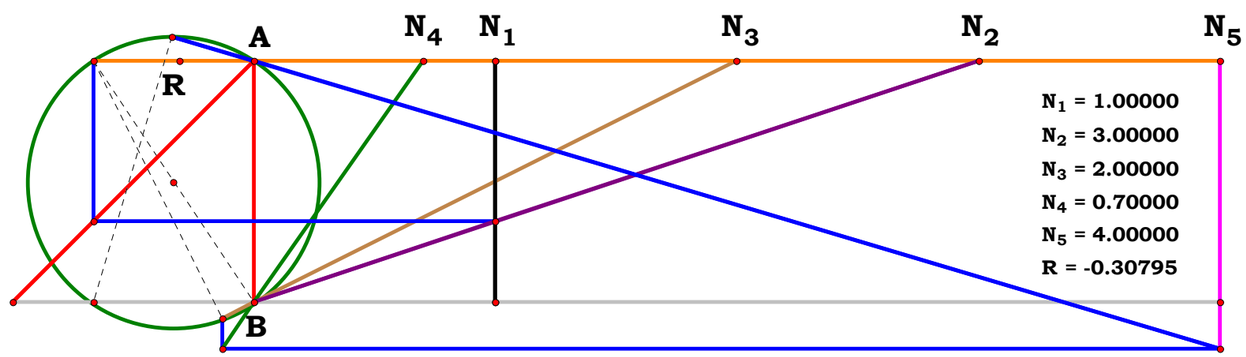
$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad GJ := \frac{BJ}{N_4}$$

$$BM := \frac{N_5}{AB - GJ} \qquad AM := \sqrt{AB^2 + BM^2}$$

$$FM := \frac{BM \cdot (BM + AD)}{AM} \qquad AF := AM - FM \qquad EF := \frac{BM \cdot AF}{AM}$$

$$AE := \frac{AF}{AM} \qquad R := \frac{EF}{AB - AE} \qquad R = 0.242875$$



$$\frac{(N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_1-N_2) - N_2 \cdot (((N_1 \cdot N_3^2 - N_2 \cdot N_3^2) + N_2 \cdot N_3) - N_2 \cdot N_4 - N_2 \cdot N_3^2 \cdot N_4))}{(N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) + (N_1-N_2) \cdot (((N_1 \cdot N_3^2 - N_2 \cdot N_3^2) + N_2 \cdot N_3) - N_2 \cdot N_4 - N_2 \cdot N_3^2 \cdot N_4))} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 - N_2) - N_2 \cdot (N_1 \cdot N_3^2 - N_2 \cdot N_3^2 + N_2 \cdot N_3 - N_2 \cdot N_4 - N_2 \cdot N_3^2 \cdot N_4)}{N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + (N_1 - N_2) \cdot (N_1 \cdot N_3^2 - N_2 \cdot N_3^2 + N_2 \cdot N_3 - N_2 \cdot N_4 - N_2 \cdot N_3^2 \cdot N_4)} = 0$$

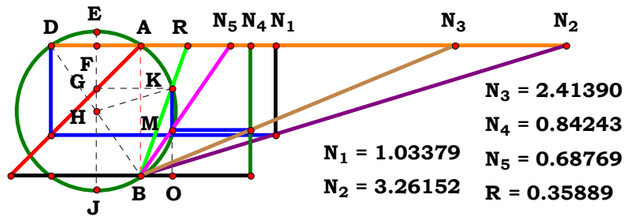
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{E \cdot A \cdot [A \cdot C \cdot (C - D) + N_u \cdot [D \cdot (A - B) + A \cdot N_u]] - A \cdot N_u \cdot (C^2 + N_u^2) \cdot (A - B)}{E \cdot (A - B) \cdot [A \cdot (C^2 - D \cdot C + N_u^2) + D \cdot N_u \cdot (A - B)] + A^2 \cdot N_u \cdot (C^2 + N_u^2)} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot l \cdot [Y \cdot (X^2 + n^2) \cdot (V \cdot Z \cdot m - W \cdot Z \cdot l + W \cdot l \cdot p) - X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)]}{Y \cdot W \cdot l \cdot (X^2 + n^2) \cdot (W \cdot Z \cdot l - V \cdot m \cdot p + W \cdot l \cdot p) + X \cdot o \cdot p \cdot (V \cdot m - W \cdot l) \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST4AB6R3



Unit. $AB := 1$ Given. $N_1 := 1.03379$ $N_2 := 3.26152$ $N_3 := 2.41390$ $N_4 := .84243$

$N_5 := .68769$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

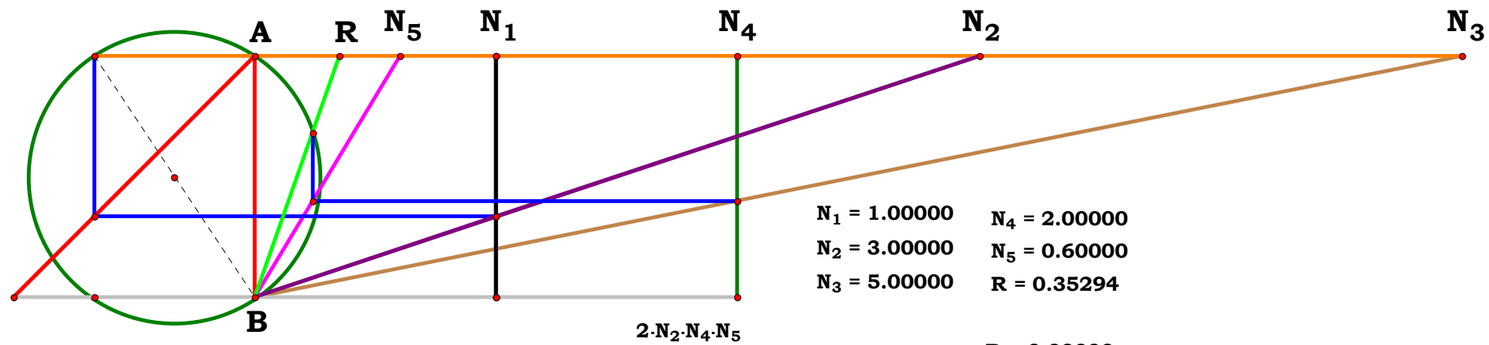
Descriptions.

$AD := \frac{N_2 - N_1}{N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$GK := \frac{AD}{2} + BO$ $EJ := \sqrt{AB^2 + AD^2}$

$GH := \sqrt{\left(\frac{EJ}{2}\right)^2 - GK^2}$ $EF := \frac{EJ - AB}{2}$

$KO := \frac{EJ}{2} + GH - EF$ $R := \frac{BO}{KO}$ $R = 0.358879$



$$\frac{2 \cdot N_2 \cdot N_4 \cdot N_5}{N_2 \cdot N_3 + \sqrt{(N_2 \cdot N_3)^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_4 \cdot N_5}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)}} = 0$$

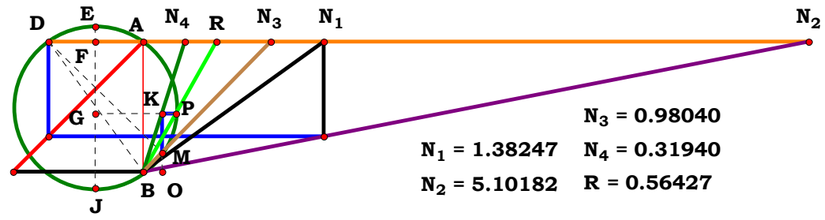
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot [A \cdot C \cdot N_u + D \cdot E \cdot (A - B)]} + \sqrt{A} \cdot D \cdot E} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot N_2 \cdot N_4 \cdot N_5}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)}} = 0$$

4RST4AB6R4



$N_3 = 0.98040$
$N_1 = 1.38247$ $N_4 = 0.31940$
$N_2 = 5.10182$ $R = 0.56427$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 5.10182$ $N_3 := .98040$ $N_4 := .31940$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

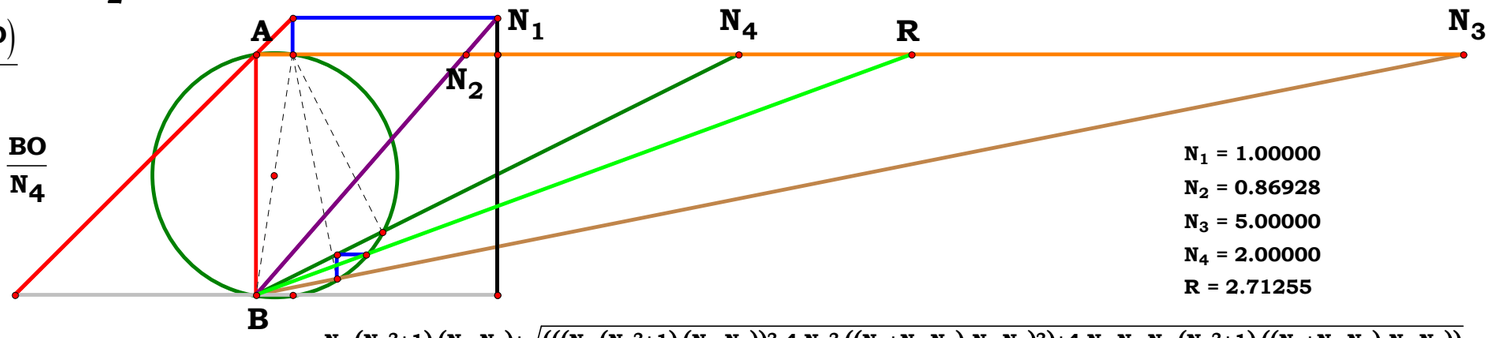
$AD := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AD^2}$ $EF := \frac{EJ - AB}{2}$

$BN_3 := \sqrt{AB^2 + N_3^2}$ $MN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BM := BN_3 - MN_3$ $BO := \frac{N_3 \cdot BM}{BN_3}$ $KO := \frac{BO}{N_4}$

$GJ := KO + EF$ $EG := EJ - GJ$

$GP := \sqrt{EG \cdot GJ}$ $R := \frac{GP - \frac{AD}{2}}{KO}$ $R = 0.564269$



$N_1 = 1.00000$
$N_2 = 0.86928$
$N_3 = 5.00000$
$N_4 = 2.00000$
$R = 2.71255$

$$\frac{N_4 \cdot (N_3^2+1) \cdot (N_1-N_2) + \sqrt{(((N_4 \cdot (N_3^2+1)) \cdot (N_1-N_2))^2 - 4 \cdot N_3^2 \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3)^2) + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3))}}{2 \cdot N_3 \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_4^2} \cdot AD \cdot N_4 \cdot (N_3^2+1) - N_4 \cdot \sqrt{N_3 \cdot N_4 \cdot [AD \cdot N_3 \cdot (2 \cdot AD \cdot N_4 - 4 \cdot N_3^2 + AD \cdot N_3^2 \cdot N_4 - 4) + 4 \cdot N_3^2 + 4] + 4 \cdot N_3^2 \cdot [AD \cdot N_3 \cdot (2 - AD \cdot N_3) - 1] + AD^2 \cdot N_4^2}}{2 \cdot \sqrt{N_4^2} \cdot N_3 \cdot (AD \cdot N_3 - 1)} = 0$$

$$R - \frac{\sqrt{N_4^2 \cdot (N_3^2+1)^2 \cdot (N_1-N_2)^2 - 4 \cdot N_3^2 \cdot (N_2+N_1 \cdot N_3 - N_2 \cdot N_3)^2 + 4 \cdot N_2 \cdot N_3 \cdot N_4 \cdot (N_3^2+1) \cdot (N_2+N_1 \cdot N_3 - N_2 \cdot N_3)} + N_4 \cdot (N_3^2+1) \cdot (N_1-N_2)}{2 \cdot N_3 \cdot (N_2+N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

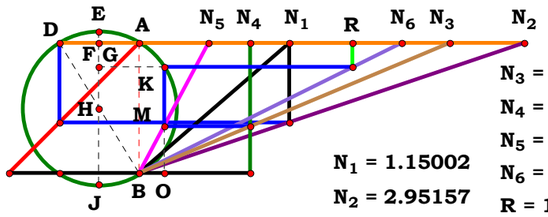
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{4 \cdot D \cdot [A \cdot C - N_u \cdot (A-B)] \cdot [A \cdot (C^2 - D \cdot C + N_u^2) + D \cdot N_u \cdot (A-B)] + (C^2 + N_u^2)^2 \cdot (A-B)^2} - C^2 \cdot (A-B) - N_u^2 \cdot (A-B)}{2 \cdot D \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2 \cdot (Y^2+o^2)^2 \cdot (W \cdot n - X \cdot m)^2 + 4 \cdot Z \cdot X \cdot Y \cdot m \cdot p \cdot (Y^2+o^2) \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o) - 4 \cdot Y^2 \cdot p^2 \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o)^2} + Z \cdot (Y^2+o^2) \cdot (W \cdot n - X \cdot m)}{2 \cdot Y \cdot p \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + X \cdot m \cdot o)} = 0$$

4RST4AB6R5



$N_3 = 2.38247$
$N_4 = 0.85448$
$N_5 = 0.53272$
$N_6 = 2.01464$
$R = 1.63438$

$N_1 = 1.15002$
$N_2 = 2.95157$

Unit. $AB := 1$ Given. $N_1 := 1.15002$ $N_2 := 2.95157$ $N_3 := 2.38247$

$N_4 := .85448$ $N_5 := .53272$ $N_6 := 2.01464$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

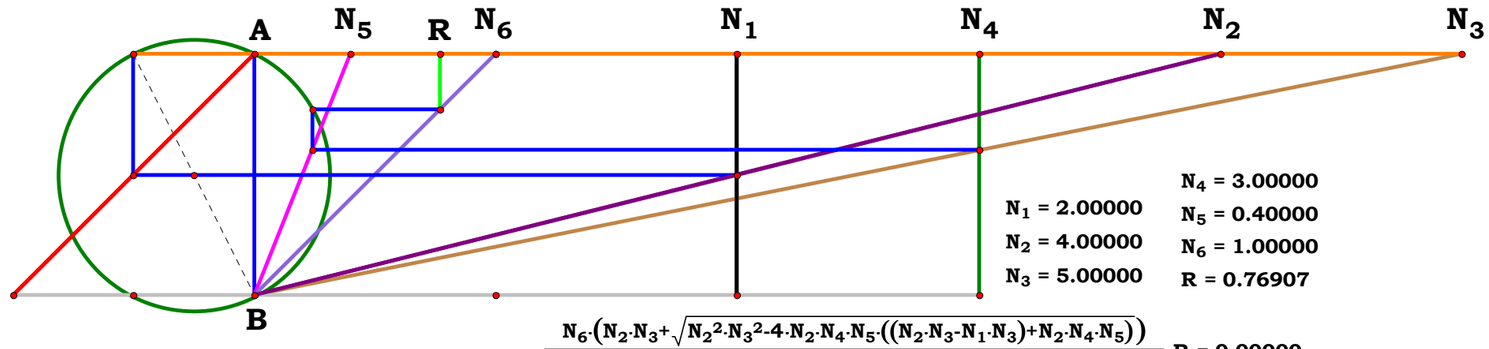
$AD := \frac{N_2 - N_1}{N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$FK := BO + \frac{AD}{2}$ $EJ := \sqrt{AD^2 + AB^2}$

$HK := \frac{EJ}{2}$ $FH := \sqrt{HK^2 - FK^2}$

$EF := \frac{EJ - AB}{2}$ $KO := HK + FH - EF$

$R := N_6 \cdot KO$ $R = 1.634379$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 5.00000$

$N_4 = 3.00000$
$N_5 = 0.40000$
$N_6 = 1.00000$
$R = 0.76907$

$\frac{N_6 \cdot \left(N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}\right)}{2 \cdot N_2 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \left[N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot \left(N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5\right)}\right]}{2 \cdot N_2 \cdot N_3} = 0$$

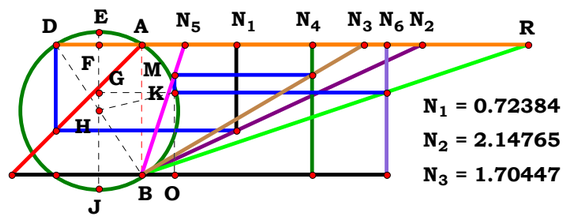
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]}{2 \cdot F \cdot \sqrt{A} \cdot D \cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{4 \cdot Y \cdot V \cdot W \cdot X \cdot m \cdot n \cdot o \cdot (U \cdot l - V \cdot k) + V^2 \cdot k \cdot \left(W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2\right)} + V \cdot W \cdot \sqrt{k} \cdot n \cdot o\right]}{2 \cdot V \cdot W \cdot p \cdot \sqrt{k} \cdot n \cdot o} = 0$$

4RST4AB6R6



$N_1 = 0.72384$
$N_2 = 2.14765$
$N_3 = 1.70447$
$N_4 = 1.30972$
$N_5 = 0.32932$
$N_6 = 1.87904$
$R = 2.95944$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 2.14765$ $N_3 := 1.70447$ $N_4 := 1.30972$ $N_5 := .32932$ $N_6 := 1.87904$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

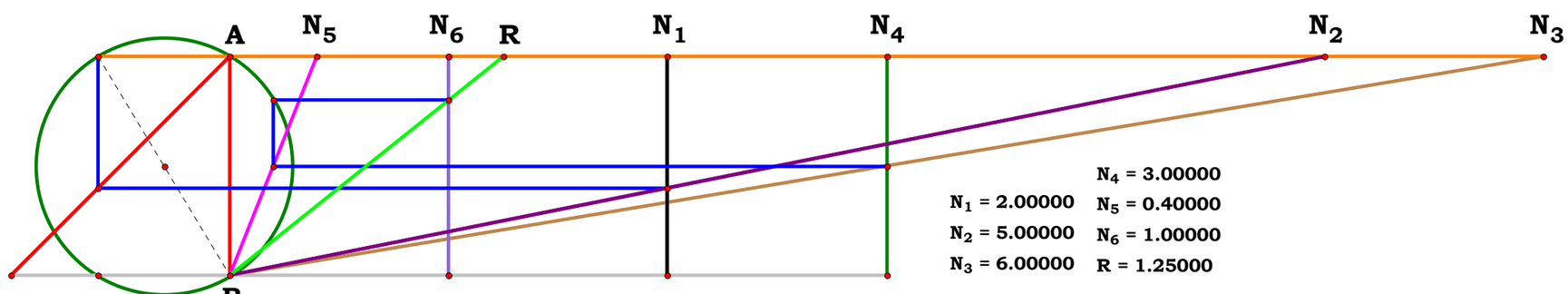
$AD := \frac{N_2 - N_1}{N_2}$ $MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$

$EJ := \sqrt{AD^2 + AB^2}$ $EF := \frac{EJ - AB}{2}$

$HK := \frac{EJ}{2}$ $GK := \frac{AD}{2} + BO$

$GH := \sqrt{HK^2 - GK^2}$ $KO := HK + GH - EF$

$R := \frac{N_6}{KO}$ $R = 2.959505$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 6.00000$
$N_4 = 3.00000$
$N_5 = 0.40000$
$N_6 = 1.00000$
$R = 1.25000$

$R - \frac{2 \cdot N_2 \cdot N_3 \cdot N_6}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}} = 0.00000$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot N_6}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)}} = 0$$

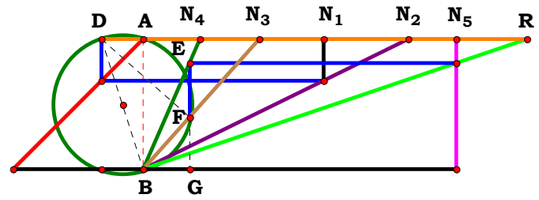
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{A} \cdot D \cdot E}{F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot [A \cdot C \cdot N_u + D \cdot E \cdot (A - B)]} + \sqrt{A} \cdot D \cdot E\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot V \cdot W \cdot Z \cdot \sqrt{k} \cdot n \cdot o}{p \cdot \left[\sqrt{4 \cdot Y \cdot V \cdot W \cdot X \cdot m \cdot n \cdot o \cdot (U \cdot l - V \cdot k) + V^2 \cdot k \cdot \left(W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2\right)} + V \cdot W \cdot \sqrt{k} \cdot n \cdot o\right]} = 0$$

4RST4AB6R7



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.89323$
$N_4 = 0.43563$
$N_5 = 2.40207$
$R = 2.94715$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .89323$

$N_4 := .43563$ $N_5 := 2.40207$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

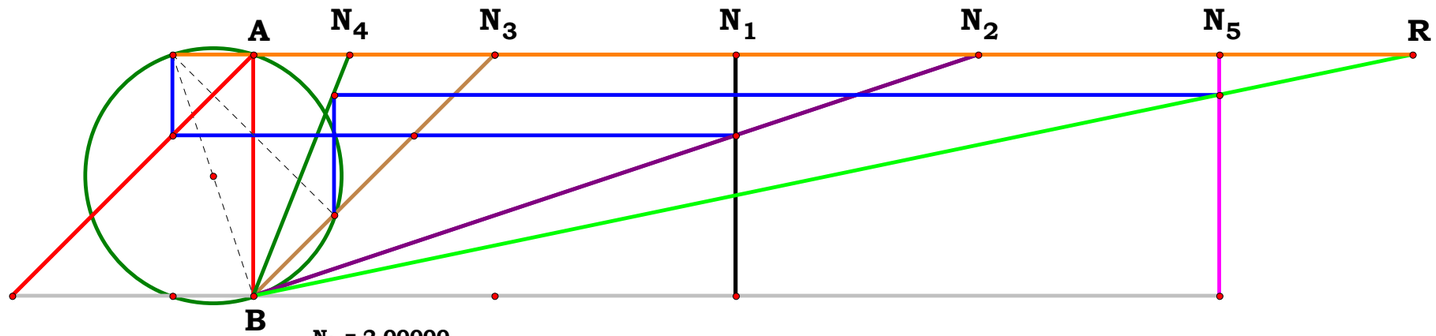
Descriptions.

$AD := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3{}^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{BG}{N_4}$

$R := \frac{N_5}{EG}$ $R = 2.947144$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 4.00000$
$R = 4.80000$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2+1)}{N_3 \cdot ((N_2+N_1 \cdot N_3)-N_2 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot \left(N_3{}^2 + 1\right)}{N_3 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)} = 0$$

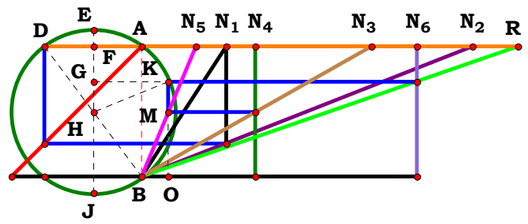
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right)}{X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST4AB6R8



$N_1 = 0.64635$
$N_2 = 2.53508$
$N_3 = 1.76258$
$N_4 = 0.87386$
$N_5 = 0.41649$
$N_6 = 2.11150$
$R = 2.88713$

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.53508$ $N_3 := 1.76258$ $N_4 := .87386$ $N_5 := .41649$ $N_6 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$AD := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AD^2 + AB^2}$ $EF := \frac{EJ - AB}{2}$

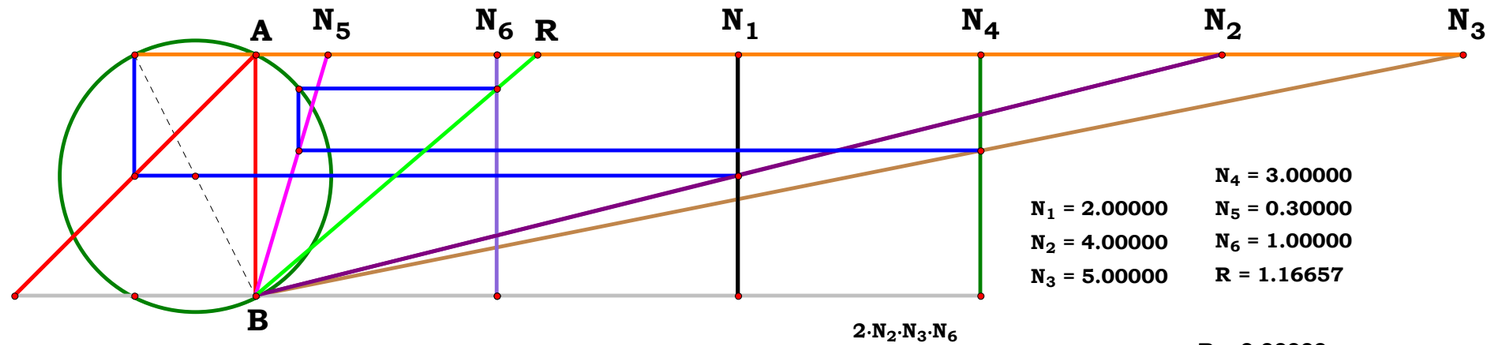
$MO := \frac{N_4}{N_3}$ $BO := N_5 \cdot MO$ $GK := BO + \frac{AD}{2}$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$KO := HK + GH - EF$ $R := \frac{N_6}{KO}$

$R = 2.887152$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 2.00000$ $N_4 = 3.00000$
$N_2 = 4.00000$ $N_5 = 0.30000$
$N_3 = 5.00000$ $N_6 = 1.00000$
$R = 1.16657$

$$\frac{2 \cdot N_2 \cdot N_3 \cdot N_6}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot N_6}{N_2 \cdot N_3 + \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)}} = 0$$

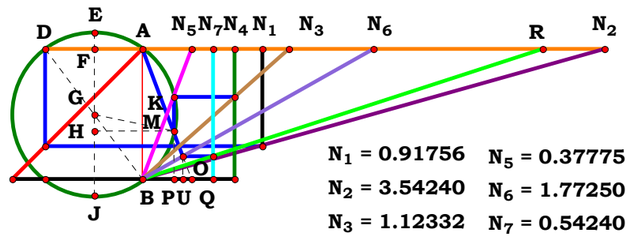
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{A} \cdot D \cdot E}{F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot [A \cdot C \cdot N_u + D \cdot E \cdot (A - B)]} + \sqrt{A} \cdot D \cdot E\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot V \cdot W \cdot Z \cdot \sqrt{k} \cdot n \cdot o}{p \cdot \left[\sqrt{4 \cdot Y \cdot V \cdot W \cdot X \cdot m \cdot n \cdot o \cdot (U \cdot l - V \cdot k) + V^2 \cdot k \cdot (W^2 \cdot n^2 \cdot o^2 - 4 \cdot X^2 \cdot Y^2 \cdot m^2)} + V \cdot W \cdot \sqrt{k} \cdot n \cdot o\right]} = 0$$

4RST4AB6R10



$N_1 = 0.91756$ $N_5 = 0.37775$
$N_2 = 3.54240$ $N_6 = 1.77250$
$N_3 = 1.12332$ $N_7 = 0.54240$
$N_4 = 0.70920$ $R = 3.07450$

Unit. $AB := 1$ **Given.** $N_1 := .91756$ $N_2 := 3.54240$ $N_3 := 1.12332$ $N_4 := .70920$

$N_5 := .37775$ $N_6 := 1.77250$ $N_7 := .54240$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

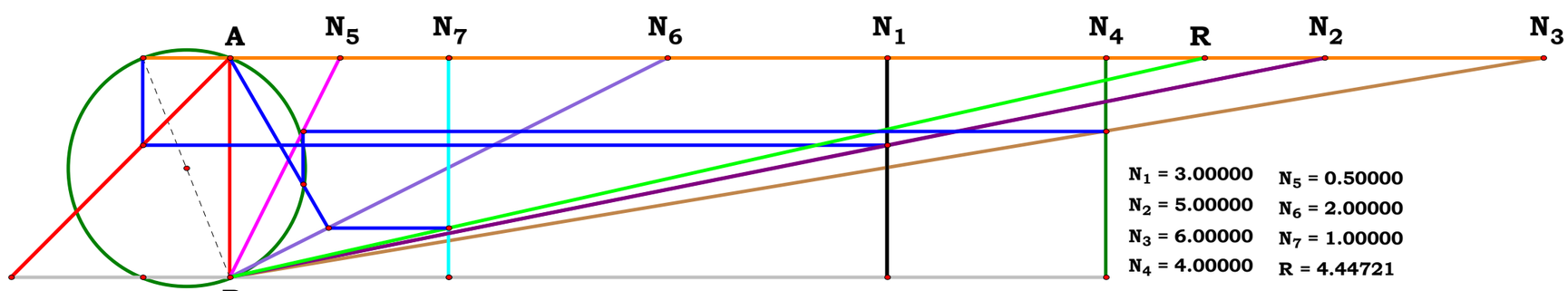
$AD := \frac{N_2 - N_1}{N_2}$ $BP := N_5 \cdot \frac{N_4}{N_3}$ $EJ := \sqrt{AD^2 + AB^2}$

$EF := \frac{EJ - AB}{2}$ $GM := \frac{EJ}{2}$ $HM := \frac{AD}{2} + BP$

$GH := \sqrt{GM^2 - HM^2}$ $FH := GM + GH - EF$

$BQ := \frac{BP}{FH}$ $BU := \frac{N_6 \cdot BQ}{N_6 + BQ}$ $OU := \frac{BU}{N_6}$

$R := \frac{N_7}{OU}$ $R = 3.074367$



$N_1 = 3.00000$ $N_5 = 0.50000$
$N_2 = 5.00000$ $N_6 = 2.00000$
$N_3 = 6.00000$ $N_7 = 1.00000$
$N_4 = 4.00000$ $R = 4.44721$

B

$$\frac{N_7 \cdot \left(N_2 \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5) + N_6 \cdot \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot ((N_2 \cdot N_3 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_5)}\right)}{2 \cdot N_2 \cdot N_4 \cdot N_5} - R = 0.00000$$

Definitions.

$$R - \frac{N_7 \cdot \left[N_6 \cdot \sqrt{N_2^2 \cdot N_3^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot N_3 - N_1 \cdot N_3 + N_2 \cdot N_4 \cdot N_5)} + N_2 \cdot (N_3 \cdot N_6 + 2 \cdot N_4 \cdot N_5)\right]}{2 \cdot N_2 \cdot N_4 \cdot N_5} = 0$$

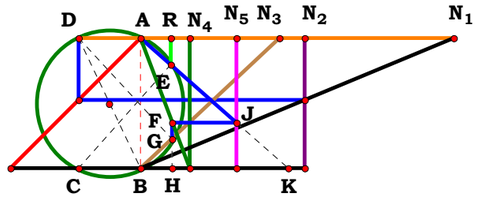
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot [A \cdot C \cdot N_u + D \cdot E \cdot (A - B)]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{2 \cdot C \cdot F \cdot G \cdot \sqrt{A}} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[Y \cdot \sqrt{U^2 \cdot j \cdot \left(V^2 \cdot m^2 \cdot n^2 - 4 \cdot W^2 \cdot X^2 \cdot l^2\right) + 4 \cdot V \cdot U \cdot W \cdot X \cdot l \cdot m \cdot n \cdot (T \cdot k - U \cdot j)} + \sqrt{j} \cdot U \cdot (V \cdot Y \cdot m \cdot n + 2 \cdot W \cdot X \cdot l \cdot o)\right]}{2 \cdot U \cdot W \cdot X \cdot l \cdot o \cdot p \cdot \sqrt{j}} = 0$$

4RST5AB1R0



$N_1 = 2.39948$
$N_2 = 1.25656$
$N_3 = 1.06757$
$N_4 = 0.37752$
$N_5 = 0.73612$
$R = 0.22832$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.25656$ $N_3 := 1.06757$ $N_4 := .37752$ $N_5 := .73612$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

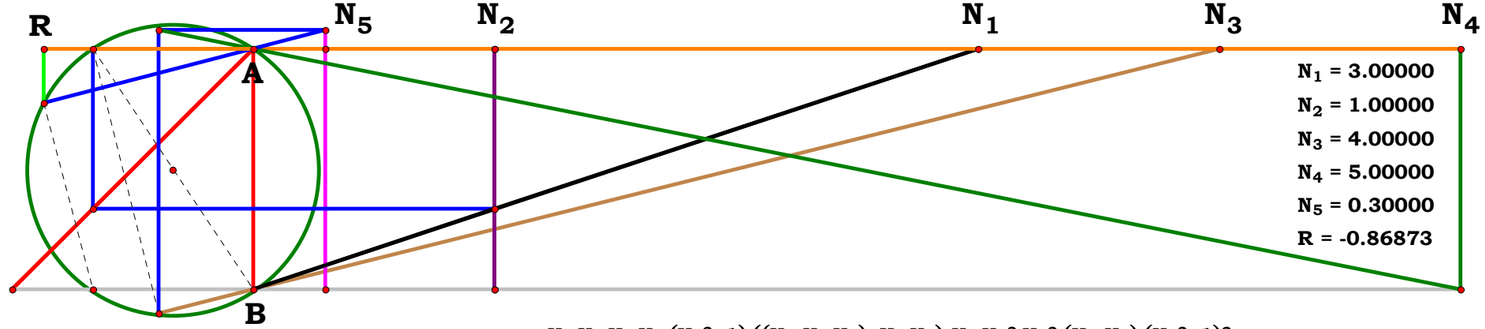
$$AD := AB - \frac{N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad GN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BG := BN_3 - GN_3 \qquad BH := \frac{N_3 \cdot BG}{BN_3} \qquad FH := \frac{N_4 - BH}{N_4}$$

$$BK := \frac{N_5}{AB - FH} \qquad AK := \sqrt{AB^2 + BK^2}$$

$$EK := \frac{BK \cdot (BK + AD)}{AK} \qquad AE := AK - EK$$

$$R := \frac{BK \cdot AE}{AK} \qquad R = 0.228316$$



$$\frac{N_1 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3) - N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 - N_2) \cdot (N_3^2+1)^2}{(N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1))^2 + N_3^2 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_3 - AD \cdot N_3^2 - AD \cdot N_4 \cdot N_5 - AD \cdot N_3^2 \cdot N_4 \cdot N_5)}{AD^2 \cdot N_3^4 - 2 \cdot AD \cdot N_3^3 + N_3^4 \cdot N_4^2 \cdot N_5^2 + 2 \cdot N_3^2 \cdot N_4^2 \cdot N_5^2 + N_3^2 + N_4^2 \cdot N_5^2} = 0$$

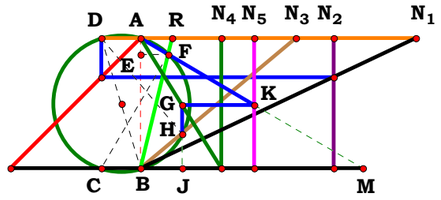
$$R - \frac{N_1 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2 + 1)^2 \cdot (N_1 - N_2)}{N_1^2 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2 + 1)^2 + N_3^2 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)^2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2) \cdot [N_u \cdot (C^2 + N_u^2) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E]}{E^2 \cdot D^2 \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)^2 + B^2 \cdot N_u^2 \cdot (C^2 + N_u^2)^2} = 0 \qquad N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2) \cdot [Y \cdot Z \cdot (X^2 + n^2) \cdot (W \cdot l - V \cdot m) + X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)]}{Y^2 \cdot V^2 \cdot Z^2 \cdot m^2 \cdot (X^2 + n^2)^2 + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)^2} = 0$$

4RST5AB1R1



$N_1 = 2.10891$
$N_2 = 1.47933$
$N_3 = 1.19349$
$N_4 = 0.61966$
$N_5 = 0.87172$
$R = 0.24517$

Unit. $AB := 1$ Given. $N_1 := 2.10891$ $N_2 := 1.47933$ $N_3 := 1.19349$ $N_4 := .61966$ $N_5 := .87172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

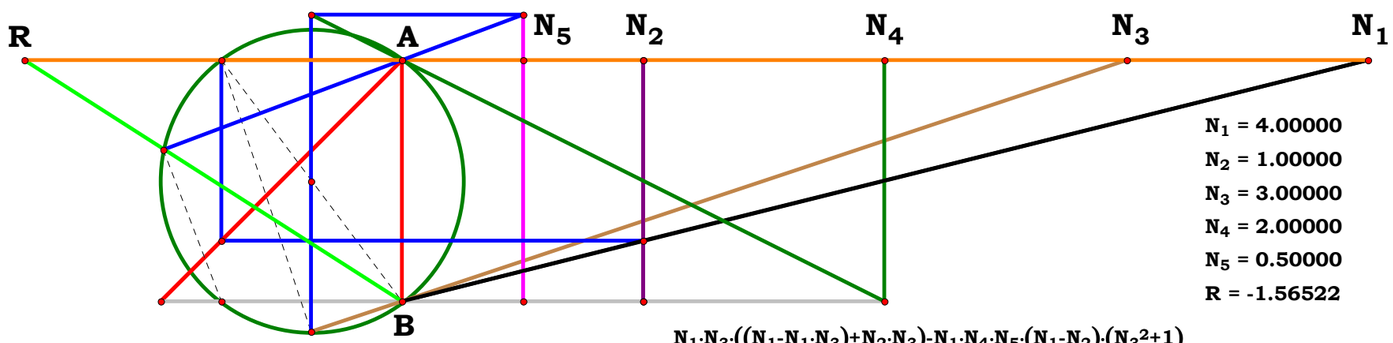
$$AD := AB - \frac{N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad HJ := \frac{N_4 - BJ}{N_4}$$

$$BM := \frac{N_5}{AB - HJ} \qquad AM := \sqrt{AB^2 + BM^2}$$

$$FM := \frac{BM \cdot (BM + AD)}{AM} \qquad AF := AM - FM \qquad AE := \frac{AF}{AM}$$

$$EF := \frac{BM \cdot AF}{AM} \qquad R := \frac{EF}{AB - AE} \qquad R = 0.245164$$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 0.50000$
$R = -1.56522$

$$\frac{N_1 \cdot N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3) - N_1 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2) \cdot (N_3^2 + 1)}{N_1^2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + N_3 \cdot (N_1 - N_2) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{AD \cdot N_3^2 - N_3 + AD \cdot N_4 \cdot N_5 + AD \cdot N_3^2 \cdot N_4 \cdot N_5}{AD^2 \cdot N_3^2 - AD \cdot N_3 - N_4 \cdot N_5 \cdot N_3^2 - N_4 \cdot N_5} = 0$$

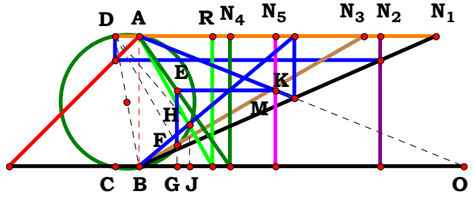
$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 - N_2)}{N_1^2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + N_3 \cdot (N_1 - N_2) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{B \cdot [E \cdot D \cdot [B \cdot C + N_u \cdot (A - B)] + N_u \cdot (C^2 + N_u^2) \cdot (A - B)]}{B^2 \cdot N_u \cdot (C^2 + N_u^2) - E \cdot D \cdot (A - B) \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)} = 0 \qquad N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot m \cdot [Y \cdot Z \cdot (X^2 + n^2) \cdot (W \cdot l - V \cdot m) + X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)]}{Y \cdot V^2 \cdot Z \cdot m^2 \cdot (X^2 + n^2) + X \cdot o \cdot p \cdot (V \cdot m - W \cdot l) \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$

4RST5AB1R2



$N_1 = 2.27357$
$N_2 = 1.84739$
$N_3 = 1.72621$
$N_4 = 0.69715$
$N_5 = 1.04606$
$R = 0.56545$

Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 1.84739$ $N_3 := 1.72621$

$N_4 := .69715$ $N_5 := 1.04606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := AB - \frac{N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2} \qquad FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

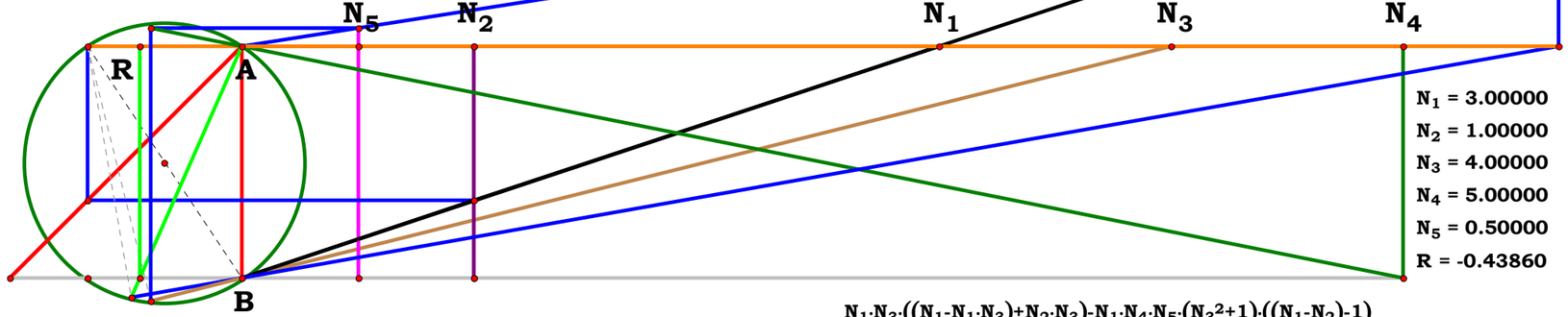
$$BF := BN_3 - FN_3 \qquad BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$BO := \frac{N_5}{AB - EG} \qquad AK := \frac{BO \cdot N_1}{BO + N_1}$$

$$BK := \sqrt{AB^2 + AK^2} \qquad HK := \frac{AK \cdot (AK + AD)}{BK}$$

$$BH := BK - HK \qquad BJ := \frac{AK \cdot BH}{BK}$$

$$HJ := \frac{BJ}{AK} \qquad R := \frac{BJ}{AB - HJ} \qquad R = 0.565442$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 0.50000$
$R = -0.43860$

$$\frac{N_1 \cdot N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3) - N_1 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot ((N_1 - N_2) - 1)}{N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot (N_1{}^2 + (N_1 - N_2)) + N_3 \cdot (N_1 - N_2) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3{}^2 + N_3{}^2 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3{}^2 \cdot N_4 \cdot N_5}{N_4 \cdot N_5 \cdot AD \cdot N_3{}^2 - N_1 \cdot AD^2 \cdot N_3{}^2 + N_1 \cdot AD \cdot N_3 + N_4 \cdot N_5 \cdot AD + N_1 \cdot N_4 \cdot N_5 \cdot N_3{}^2 + N_1 \cdot N_4 \cdot N_5} = 0$$

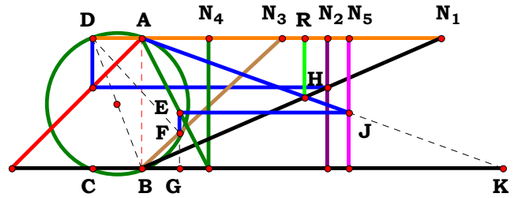
$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3) - N_1 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot (N_1 - N_2 - 1)}{N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot (N_1{}^2 + N_1 - N_2) + N_3 \cdot (N_1 - N_2) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{E \cdot B \cdot D \cdot [B \cdot C + N_u \cdot (A - B)] + B \cdot (C^2 + N_u{}^2) \cdot [A \cdot B + N_u \cdot (A - B)]}{B \cdot (C^2 + N_u{}^2) \cdot (A \cdot B - A^2 + B \cdot N_u) - E \cdot D \cdot (A - B) \cdot [B \cdot C + N_u \cdot (A - B)]} = 0 \qquad N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot m \cdot [Y \cdot Z \cdot (X^2 + n^2) \cdot (W \cdot l - V \cdot m + l \cdot m) + X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)]}{Y \cdot Z \cdot m \cdot (X^2 + n^2) \cdot (m \cdot V^2 + m \cdot V \cdot l - W \cdot l^2) + X \cdot o \cdot p \cdot (V \cdot m - W \cdot l) \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$

4RST5AB1R3



$N_1 = 2.29294$
$N_2 = 1.42122$
$N_3 = 1.07726$
$N_4 = 0.51312$
$N_5 = 1.58847$
$R = 1.25419$

Unit. $AB := 1$ Given. $N_1 := 2.29294$ $N_2 := 1.42122$ $N_3 := 1.07726$

$N_4 := .51312$ $N_5 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

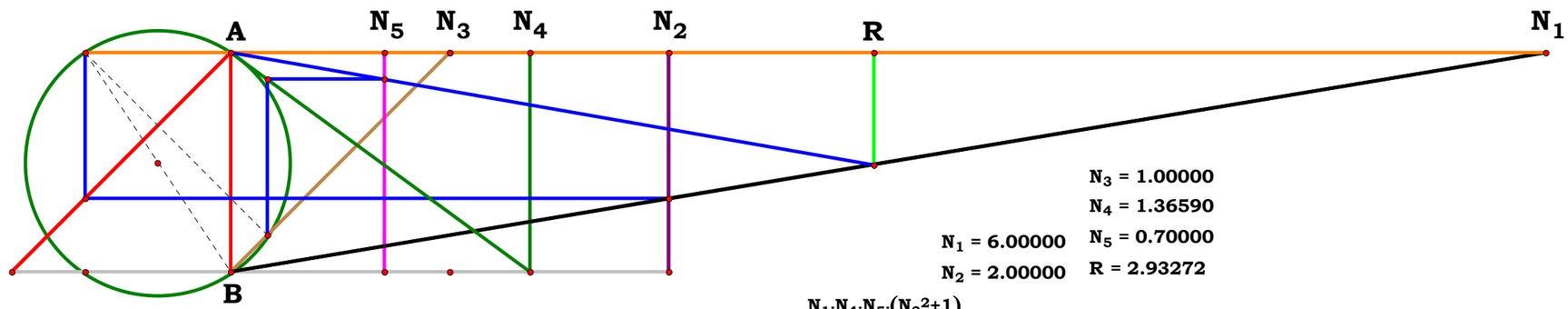
$AD := AB - \frac{N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BK := \frac{N_5}{AB - EG}$ $R := \frac{BK \cdot N_1}{BK + N_1}$

$R = 1.25419$



$N_3 = 1.00000$
$N_4 = 1.36590$
$N_5 = 0.70000$
$R = 2.93272$

$N_1 = 6.00000$
$N_2 = 2.00000$

$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{(N_2 \cdot N_3^2 - N_1 \cdot N_3^2) + N_1 \cdot N_3 + N_4 \cdot N_5 + N_3^2 \cdot N_4 \cdot N_5} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_2 \cdot N_3^2 - N_1 \cdot N_3^2 + N_1 \cdot N_3 + N_4 \cdot N_5 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

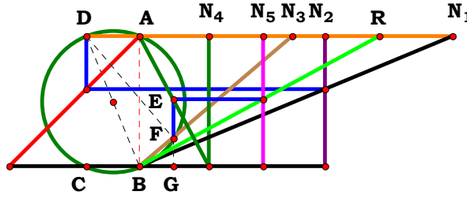
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot D \cdot [B \cdot C + N_u \cdot (A - B)] + A \cdot B \cdot (C^2 + N_u^2)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{Y \cdot Z \cdot l \cdot m \cdot (X^2 + n^2) + X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$

4RST5AB1R4



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.17412$
$N_4 = 0.53249$
$N_5 = 0.94921$
$R = 1.83694$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.17412$

$N_4 := .53249$ $N_5 := .94921$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := AB - \frac{N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BF := BN_3 - FN_3 \qquad BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$R := \frac{N_5}{EG} \qquad R = 1.836947$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_4 - N_3 + N_3^2 \cdot N_4 + AD \cdot N_3^2} = 0$$

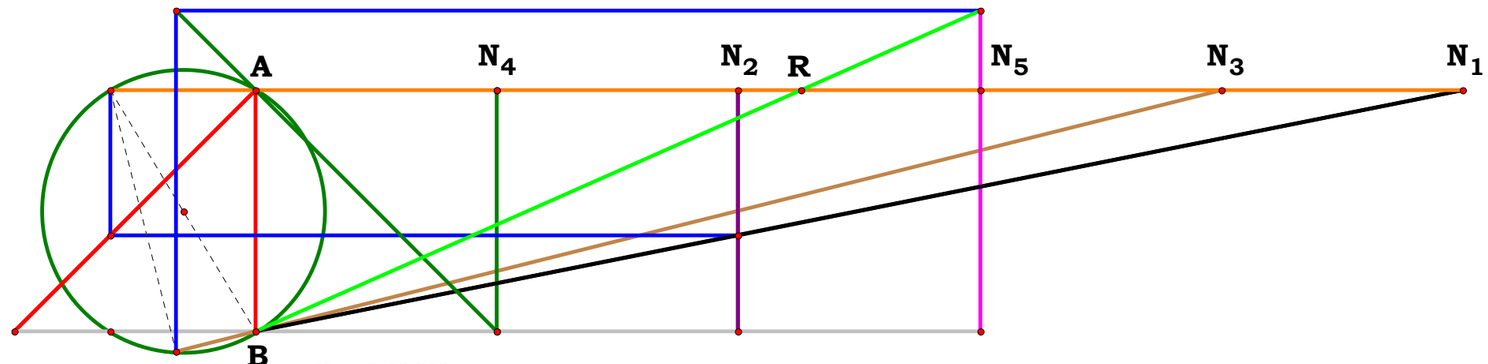
$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3^2 - N_2 \cdot N_3^2 - N_1 \cdot N_3 + N_1 \cdot N_4 + N_1 \cdot N_3^2 \cdot N_4} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [B \cdot C \cdot (C - D) + B \cdot N_u^2 - D \cdot N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

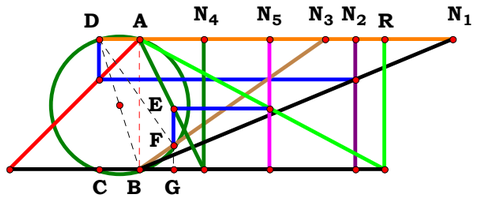
$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{p \cdot [Y \cdot V \cdot m \cdot (X^2 + n^2) + X \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)]} = 0$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$N_5 = 3.00000$
$R = 2.25664$

$$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{(N_1 \cdot N_3^2 - N_2 \cdot N_3^2 - N_1 \cdot N_3) + N_1 \cdot N_4 + N_1 \cdot N_3^2 \cdot N_4} - R = 0.00000$$

4RST5AB1R5



$N_1 = 2.39948$
$N_2 = 1.65368$
$N_3 = 1.42595$
$N_4 = 0.49375$
$N_5 = 0.99764$
$R = 1.88192$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.65368$ $N_3 := 1.42595$

$N_4 := .49375$ $N_5 := .99764$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := AB - \frac{N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$R := \frac{N_5}{AB - EG}$ $R = 1.881938$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 - AD \cdot N_3^2} = 0$$

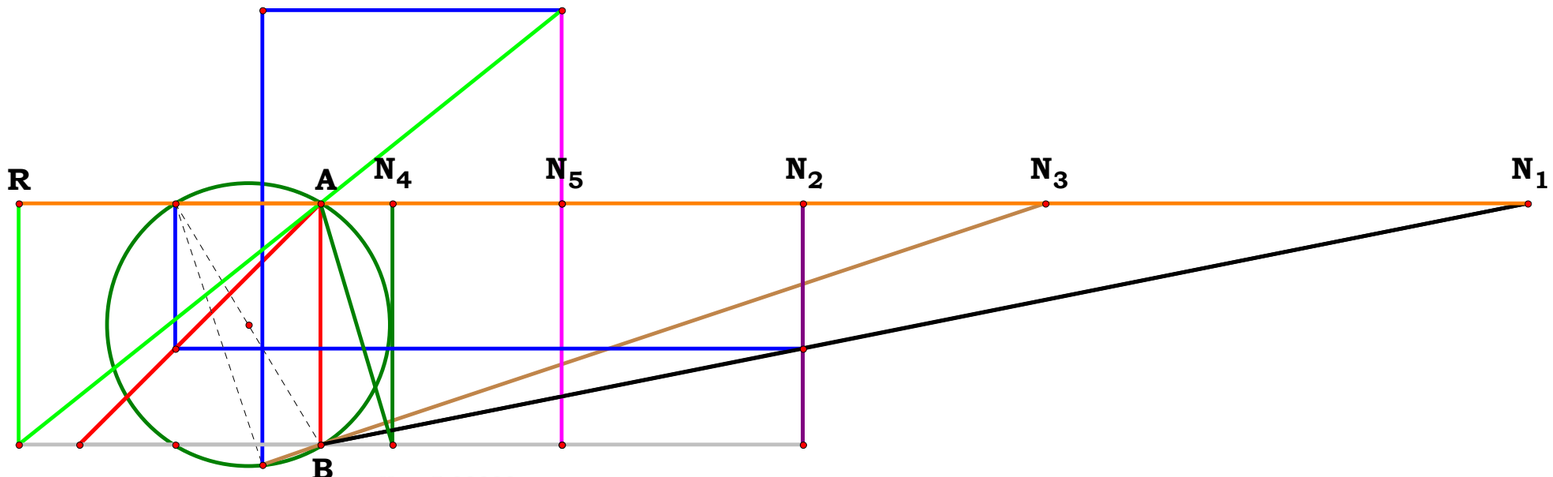
$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [B \cdot C \cdot D + D \cdot N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

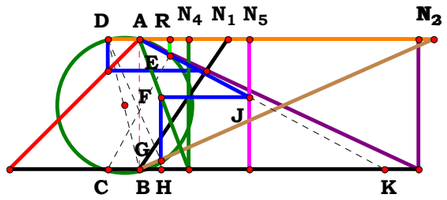
$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{X \cdot o \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 0.30000$
$N_5 = 1.00000$
$R = -1.25000$

$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$

4RST5AB3R0



$N_1 = 0.67541$
$N_2 = 2.13797$
$N_3 = 2.25892$
$N_4 = 0.37752$
$N_5 = 0.84266$
$R = 0.22786$

Unit. $AB := 1$ Given. $N_1 := .67541$ $N_2 := 2.13797$ $N_3 := 2.25892$

$N_4 := .37752$ $N_5 := .84266$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

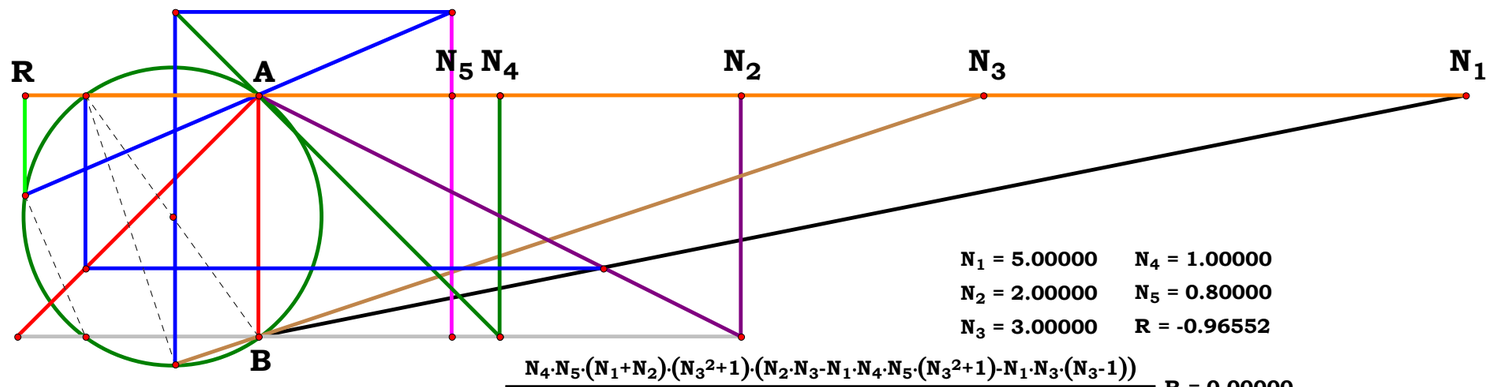
$AD := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$GN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BG := BN_3 - GN_3$

$BH := \frac{N_3 \cdot BG}{BN_3}$ $FH := \frac{N_4 - BH}{N_4}$ $BK := \frac{N_5}{AB - FH}$

$AK := \sqrt{AB^2 + BK^2}$ $EK := \frac{BK \cdot (BK + AD)}{AK}$

$AE := AK - EK$ $R := \frac{BK \cdot AE}{AK}$ $R = 0.227861$



$N_1 = 5.00000$ $N_4 = 1.00000$
$N_2 = 2.00000$ $N_5 = 0.80000$
$N_3 = 3.00000$ $R = -0.96552$

$$\frac{N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot (N_2 \cdot N_3 - N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) - N_1 \cdot N_3 \cdot (N_3-1))}{(N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1))^2 + N_3^2 \cdot (N_1 \cdot N_3 - (N_1+N_2))^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_3 - AD \cdot N_3^2 - AD \cdot N_4 \cdot N_5 - AD \cdot N_3^2 \cdot N_4 \cdot N_5)}{AD^2 \cdot N_3^4 - 2 \cdot AD \cdot N_3^3 + N_3^4 \cdot N_4^2 \cdot N_5^2 + 2 \cdot N_3^2 \cdot N_4^2 \cdot N_5^2 + N_3^2 + N_4^2 \cdot N_5^2} = 0$$

$$R - \frac{N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1) \cdot [N_2 \cdot N_3 - N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) - N_1 \cdot N_3 \cdot (N_3-1)]}{N_4^2 \cdot N_5^2 \cdot (N_1+N_2)^2 \cdot (N_3^2+1)^2 + N_3^2 \cdot (N_1 \cdot N_3 - N_2 - N_1)^2} = 0$$

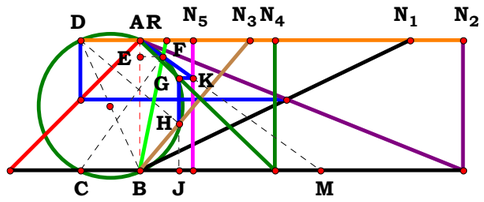
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A+B) \cdot [E \cdot D \cdot [C \cdot (A+B) - B \cdot N_u] - [B \cdot N_u \cdot (C^2 + N_u^2)]]}{E^2 \cdot D^2 \cdot [C \cdot (A+B) - B \cdot N_u]^2 + N_u^2 \cdot (C^2 + N_u^2)^2 \cdot (A+B)^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2) \cdot [X \cdot o \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n) - V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)]}{Y^2 \cdot Z^2 \cdot (X^2 + n^2)^2 \cdot (V \cdot m + W \cdot l)^2 + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n)^2} = 0$$

4RST5AB3R1



$N_1 = 2.07016$
$N_2 = 2.47697$
$N_3 = 0.84480$
$N_4 = 1.03615$
$N_5 = 0.40680$
$R = 0.19919$

Unit. $AB := 1$ **Given.** $N_1 := 2.07016$ $N_2 := 2.47697$ $N_3 := .84480$

$N_4 := 1.03615$ $N_5 := .40680$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

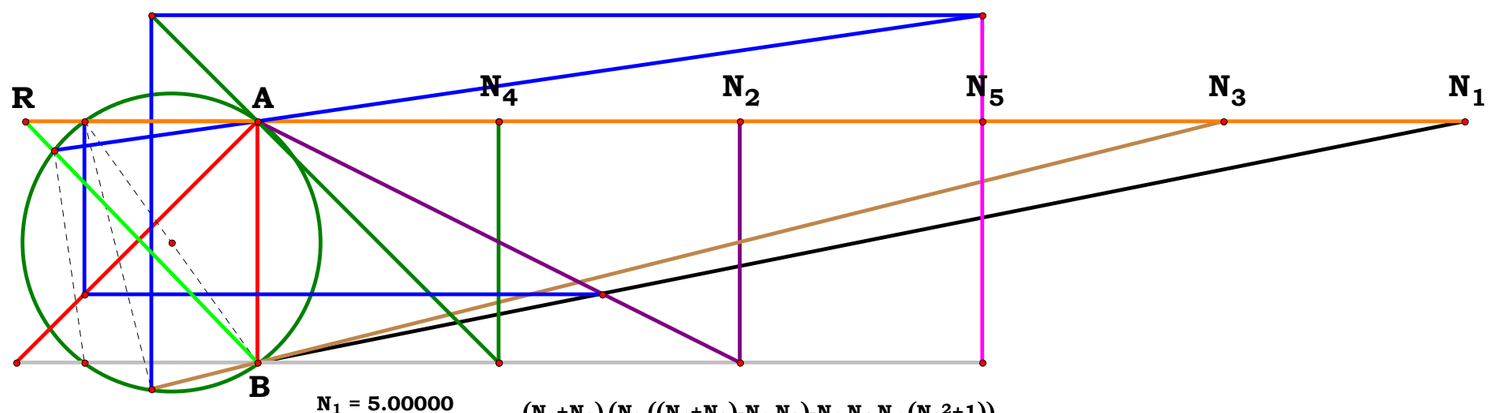
$$AD := \frac{N_1}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad HJ := \frac{N_4 - BJ}{N_4}$$

$$BM := \frac{N_5}{AB - HJ} \qquad AM := \sqrt{AB^2 + BM^2}$$

$$FM := \frac{BM \cdot (BM + AD)}{AM} \qquad AF := AM - FM \qquad AE := \frac{AF}{AM}$$

$$EF := \frac{BM \cdot AF}{AM} \qquad R := \frac{EF}{AB - AE} \qquad R = 0.199193$$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$N_5 = 3.00000$
$R = -0.95980$

$$\frac{(N_1+N_2)\cdot(N_3\cdot((N_1+N_2)-N_1\cdot N_3)-N_1\cdot N_4\cdot N_5\cdot(N_3^2+1))}{N_4\cdot N_5\cdot(N_1+N_2)^2\cdot(N_3^2+1)+N_1\cdot N_3\cdot((N_1+N_2)-N_1\cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{AD \cdot N_3^2 - N_3 + AD \cdot N_4 \cdot N_5 + AD \cdot N_3^2 \cdot N_4 \cdot N_5}{AD^2 \cdot N_3^2 - AD \cdot N_3 - N_4 \cdot N_5 \cdot N_3^2 - N_4 \cdot N_5} = 0$$

$$R - \frac{(N_1 + N_2) \cdot \left[N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3) - N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)\right]}{N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

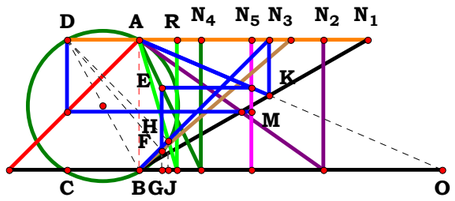
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{(A + B) \cdot \left[E \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot (C^2 + N_u^2)\right]\right]}{E \cdot B \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + N_u \cdot (C^2 + N_u^2) \cdot (A + B)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{(V \cdot m + W \cdot l) \cdot \left[X \cdot o \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n) - V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)\right]}{Y \cdot Z \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l)^2 + V \cdot X \cdot m \cdot o \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n)} = 0$$

4RST5AB3R2



$N_1 = 1.75053$
$N_2 = 1.41153$
$N_3 = 1.16443$
$N_4 = 0.47437$
$N_5 = 0.86203$
$R = 0.28775$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 1.41153$ $N_3 := 1.16443$

$N_4 := .47437$ $N_5 := .86203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

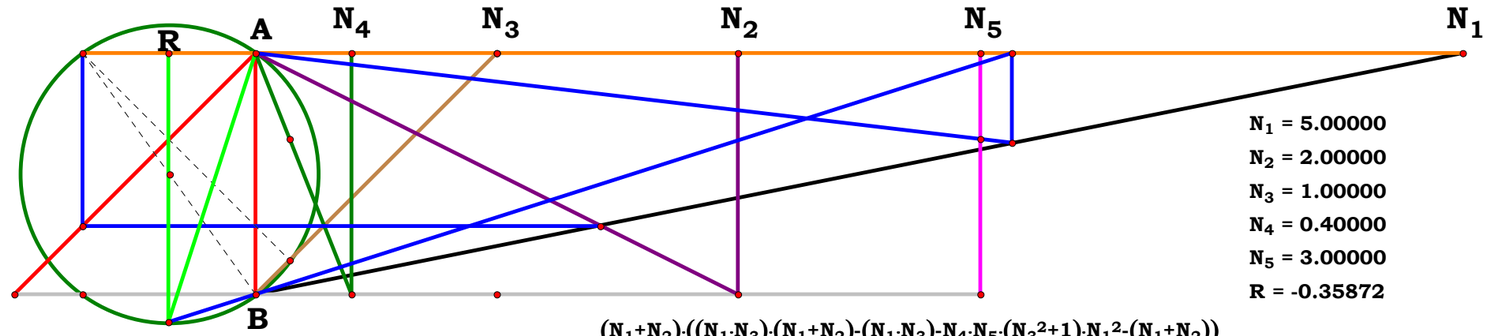
$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BO := \frac{N_5}{AB - EG}$ $AK := \frac{BO \cdot N_1}{BO + N_1}$

$BK := \sqrt{AB^2 + AK^2}$ $HK := \frac{AK \cdot (AK + AD)}{BK}$

$BH := BK - HK$ $BJ := \frac{AK \cdot BH}{BK}$

$HJ := \frac{BJ}{AK}$ $R := \frac{BJ}{AB - HJ}$ $R = 0.287754$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 3.00000$
$R = -0.35872$

$$\frac{(N_1+N_2)\cdot((N_1\cdot N_3)\cdot(N_1+N_2)-(N_1\cdot N_3)-N_4\cdot N_5\cdot(N_3^2+1)\cdot N_1^2-(N_1+N_2))}{N_1\cdot N_4\cdot N_5\cdot(N_3^2+1)\cdot(N_1+N_2)\cdot((N_1+N_2)+1)+N_1^2\cdot N_3\cdot((N_1+N_2)-(N_1\cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{N_1\cdot N_3 + N_4\cdot N_5 - AD\cdot N_1\cdot N_3^2 + N_3^2\cdot N_4\cdot N_5 - AD\cdot N_1\cdot N_4\cdot N_5 - AD\cdot N_1\cdot N_3^2\cdot N_4\cdot N_5}{AD\cdot(N_1\cdot N_3 + N_4\cdot N_5 - AD\cdot N_1\cdot N_3^2 + N_3^2\cdot N_4\cdot N_5) + N_1\cdot N_3^2\cdot N_4\cdot N_5 + N_1\cdot N_4\cdot N_5} = 0$$

$$R - \frac{(N_1+N_2)\cdot[N_1\cdot N_3\cdot(N_1+N_2-N_1\cdot N_3) - N_4\cdot N_5\cdot(N_3^2+1)\cdot(N_1^2-N_1-N_2)]}{N_1\cdot N_4\cdot N_5\cdot(N_3^2+1)\cdot(N_1+N_2)\cdot(N_1+N_2+1) + N_1^2\cdot N_3\cdot(N_1+N_2-N_1\cdot N_3)} = 0$$

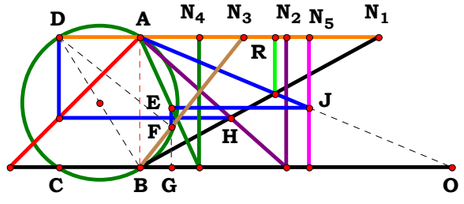
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A+B)\cdot[E\cdot D\cdot[C\cdot(A+B) - B\cdot N_u] + (C^2+N_u^2)\cdot[A^2 + B\cdot(A-N_u)]]}{E\cdot B\cdot D\cdot[C\cdot(A+B) - B\cdot N_u] + (C^2+N_u^2)\cdot(A+B)\cdot[A\cdot B + N_u\cdot(A+B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{(V\cdot m + W\cdot l)\cdot[Y\cdot Z\cdot(X^2+n^2)\cdot(m\cdot V\cdot l - m\cdot V^2 + W\cdot l^2) + V\cdot X\cdot o\cdot p\cdot(V\cdot m\cdot n - V\cdot X\cdot m + W\cdot l\cdot n)]}{V\cdot[Y\cdot Z\cdot(X^2+n^2)\cdot(V\cdot m + W\cdot l + l\cdot m)\cdot(V\cdot m + W\cdot l) + V\cdot X\cdot m\cdot o\cdot p\cdot(V\cdot m\cdot n - V\cdot X\cdot m + W\cdot l\cdot n)]} = 0$$

4RST5AB3R3



$N_1 = 1.82802$
$N_2 = 1.12096$
$N_3 = 0.79637$
$N_4 = 0.45500$
$N_5 = 1.29790$
$R = 1.03641$

Unit. $AB := 1$ **Given.** $N_1 := 1.82802$ $N_2 := 1.12096$ $N_3 := .79637$

$N_4 := .45500$ $N_5 := 1.29790$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

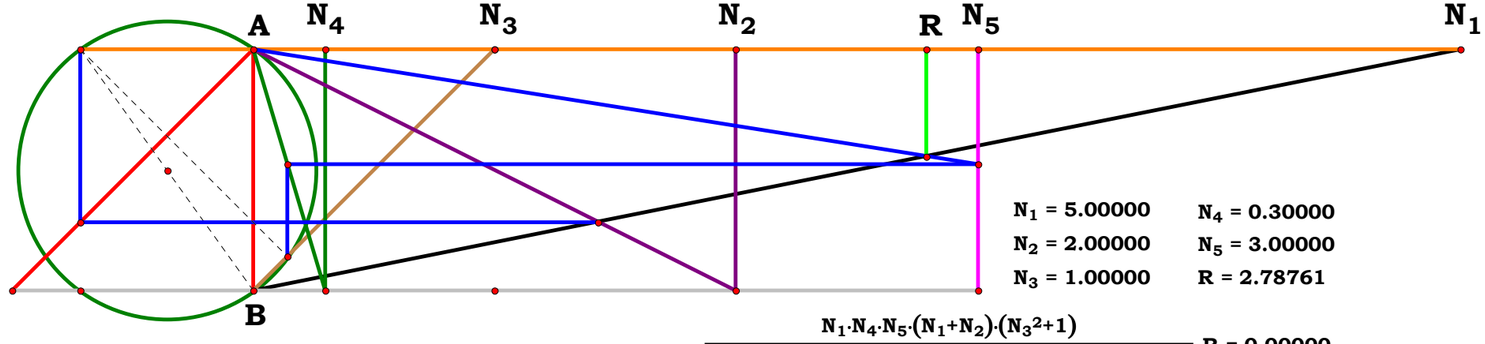
Descriptions.

$$AD := \frac{N_1}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2}$$

$$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BF := BN_3 - FN_3$$

$$BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4} \qquad BK := \frac{N_5}{AB - EG}$$

$$R := \frac{BK \cdot N_1}{BK + N_1} \qquad R = 1.036407$$



$N_1 = 5.00000$ $N_4 = 0.30000$
$N_2 = 2.00000$ $N_5 = 3.00000$
$N_3 = 1.00000$ $R = 2.78761$

$$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot ((N_1 + N_2) - N_1 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 + N_2)}{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 + N_2) + N_1 \cdot N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

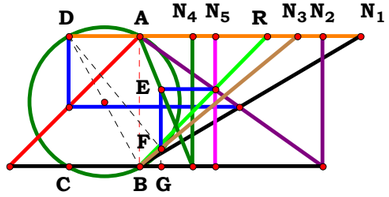
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{E \cdot D \cdot [C \cdot (A + B) - B \cdot N_u] + A \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{Y \cdot Z \cdot l \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + V \cdot X \cdot o \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n)} = 0$$

4RST5AB3R4



$N_1 = 1.69242$
$N_2 = 1.40185$
$N_3 = 1.21286$
$N_4 = 0.40657$
$N_5 = 0.58115$
$R = 0.97899$

Unit. $AB := 1$ **Given.** $N_1 := 1.69242$ $N_2 := 1.40185$ $N_3 := 1.21286$

$N_4 := .40657$ $N_5 := .58115$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3{}^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$R := \frac{N_5}{EG}$ $R = 0.979006$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3{}^2 + 1)}{N_4 - N_3 + N_3{}^2 \cdot N_4 + AD \cdot N_3{}^2} = 0$$

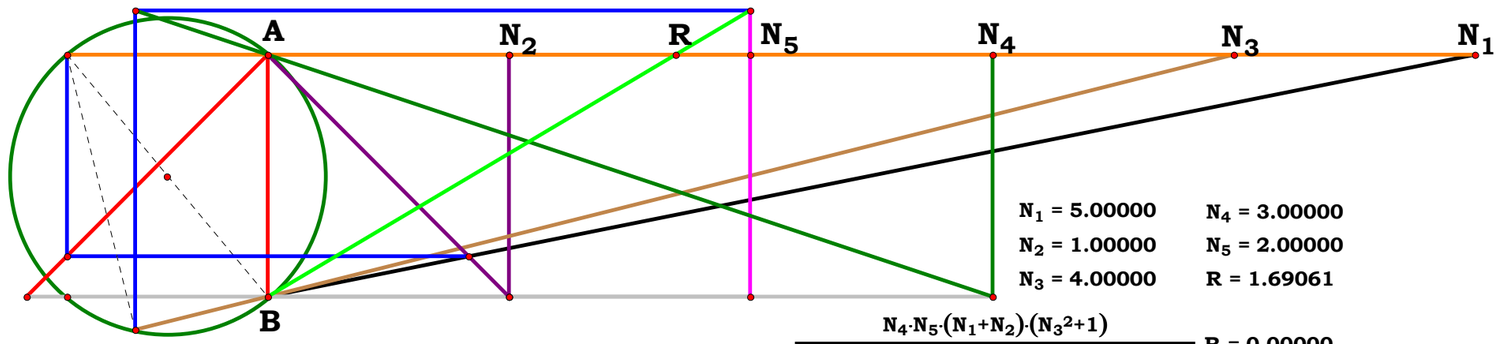
$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{(N_3{}^2 + 1) \cdot (N_1 + N_2) \cdot N_4 + N_3 \cdot (N_1 \cdot N_3 - N_2 - N_1)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u{}^2) \cdot (A + B)}{E \cdot [C^2 \cdot (A + B) + N_u{}^2 \cdot (A + B) - D \cdot [C \cdot (A + B) - B \cdot N_u]]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

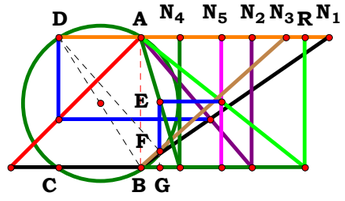
$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{(N_3{}^2 + 1) \cdot (N_1 + N_2) \cdot N_4 + N_3 \cdot (N_1 \cdot N_3 - N_2 - N_1)} = 0$$



$N_1 = 5.00000$ $N_4 = 3.00000$
$N_2 = 1.00000$ $N_5 = 2.00000$
$N_3 = 4.00000$ $R = 1.69061$

$$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_4 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1) + N_3 \cdot (N_1 \cdot N_3 - N_1 - N_2)} - R = 0.00000$$

4RST5AB3R5



$N_1 = 1.44059$
$N_2 = 0.84976$
$N_3 = 1.11600$
$N_4 = 0.30003$
$N_5 = 0.61989$
$R = 1.25552$

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := .84976$ $N_3 := 1.11600$

$N_4 := .30003$ $N_5 := .61989$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

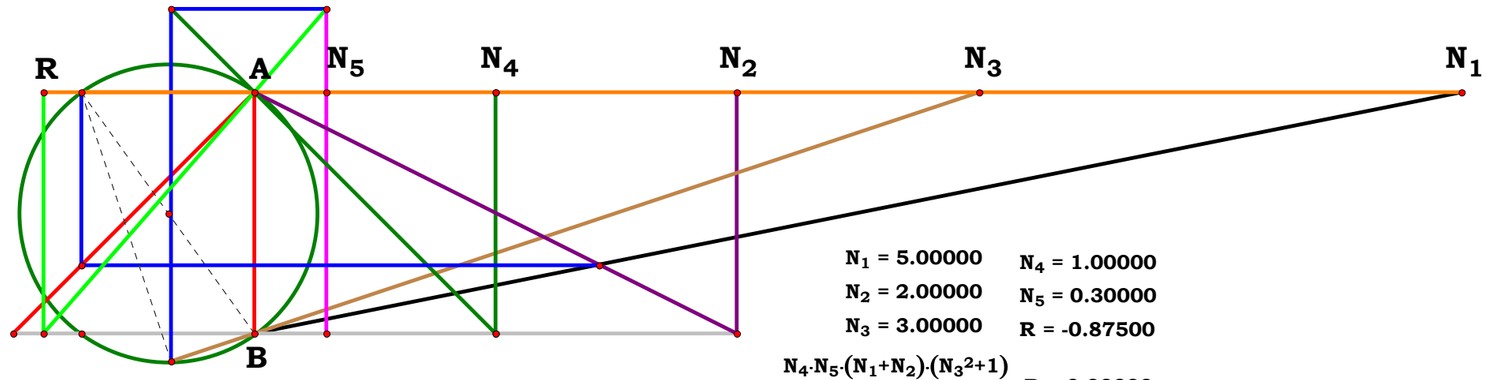
Descriptions.

$$AD := \frac{N_1}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2}$$

$$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BF := BN_3 - FN_3$$

$$BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$R := \frac{N_5}{AB - EG} \qquad R = 1.255517$$



$N_1 = 5.00000$ $N_4 = 1.00000$
$N_2 = 2.00000$ $N_5 = 0.30000$
$N_3 = 3.00000$ $R = -0.87500$

$\frac{N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1)}{N_3 \cdot ((N_1+N_2) - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 - AD \cdot N_3^2} = 0$$

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

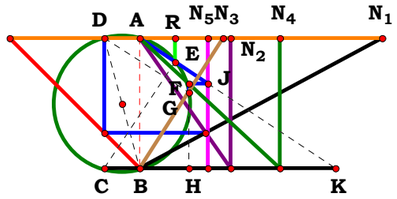
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{D \cdot E \cdot [C \cdot (A + B) - B \cdot N_u]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{o \cdot p \cdot (V \cdot X \cdot m \cdot n - V \cdot X^2 \cdot m + W \cdot X \cdot l \cdot n)} = 0$$

4RST5AB4R0



$N_1 = 1.85708$
$N_2 = 0.69478$
$N_3 = 0.64140$
$N_4 = 1.07489$
$N_5 = 0.52303$
$R = 0.27327$

Unit. $AB := 1$ Given. $N_1 := 1.85708$ $N_2 := .69478$ $N_3 := .64140$

$N_4 := 1.07489$ $N_5 := .52303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

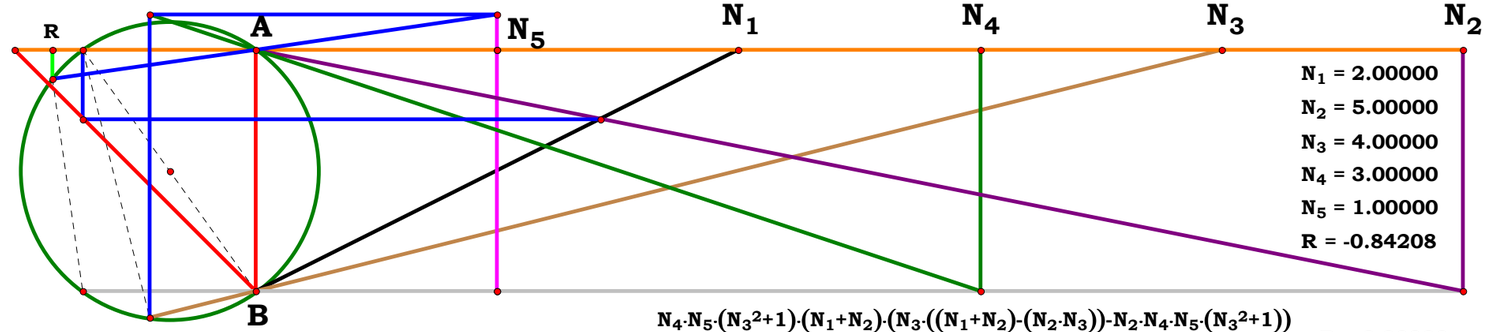
$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad GN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BG := BN_3 - GN_3 \qquad BH := \frac{N_3 \cdot BG}{BN_3}$$

$$FH := \frac{N_4 - BH}{N_4} \qquad BK := \frac{N_5}{AB - FH}$$

$$AK := \sqrt{AB^2 + BK^2} \qquad EK := \frac{BK \cdot (BK + AD)}{AK}$$

$$AE := AK - EK \qquad R := \frac{BK \cdot AE}{AK} \qquad R = 0.273271$$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 1.00000$
$R = -0.84208$

$$\frac{N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_1+N_2) \cdot (N_3 \cdot ((N_1+N_2)-(N_2 \cdot N_3)) - N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1))}{(N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1))^2 + N_3^2 \cdot ((N_1+N_2)-(N_2 \cdot N_3))^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) \cdot \left(N_3 - AD \cdot N_3^2 - AD \cdot N_4 \cdot N_5 - AD \cdot N_3^2 \cdot N_4 \cdot N_5\right)}{AD^2 \cdot N_3^4 - 2 \cdot AD \cdot N_3^3 + N_3^4 \cdot N_4^2 \cdot N_5^2 + 2 \cdot N_3^2 \cdot N_4^2 \cdot N_5^2 + N_3^2 + N_4^2 \cdot N_5^2} = 0$$

$$R - \frac{N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) \cdot \left(N_1 + N_2\right) \cdot \left[N_3 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) - N_2 \cdot N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right)\right]}{N_4^2 \cdot N_5^2 \cdot \left(N_1 + N_2\right)^2 \cdot \left(N_3^2 + 1\right)^2 + N_3^2 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right)^2} = 0$$

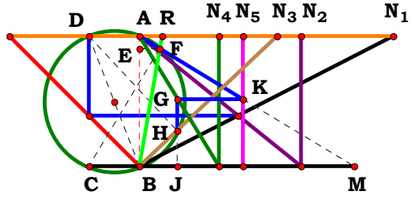
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B) \cdot \left[E \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{E^2 \cdot D^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A + B)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot \left(X^2 + n^2\right) \cdot \left[X \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n) - W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right)\right]}{Y^2 \cdot Z^2 \cdot \left(X^2 + n^2\right)^2 \cdot (V \cdot m + W \cdot l)^2 + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)^2} = 0$$

4RST5AB4R1



$N_1 = 1.94425$
$N_2 = 1.23719$
$N_3 = 1.05789$
$N_4 = 0.60998$
$N_5 = 0.79423$
$R = 0.17611$

Unit. $AB := 1$ Given. $N_1 := 1.94425$ $N_2 := 1.23719$ $N_3 := 1.05789$

$N_4 := .60998$ $N_5 := .79423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

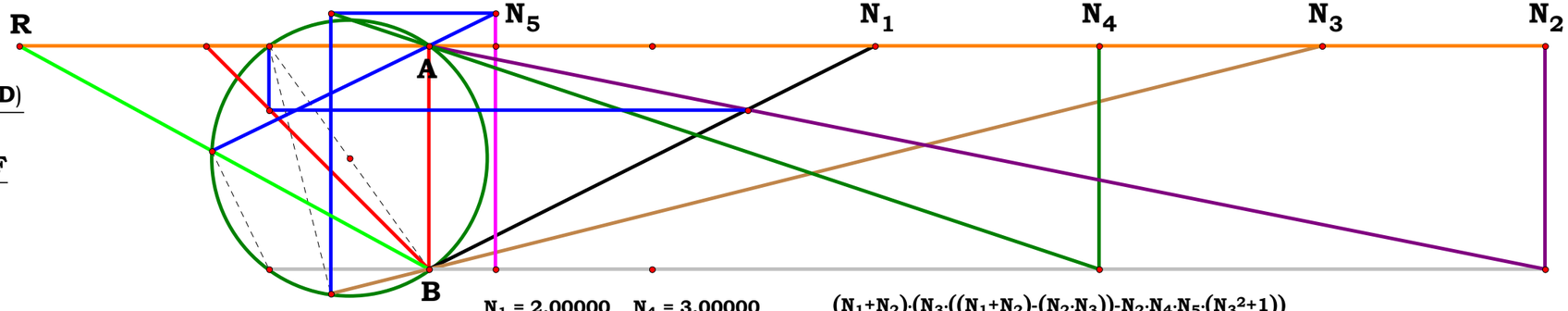
$BH := BN_3 - HN_3$ $BJ := \frac{N_3 \cdot BH}{BN_3}$

$HJ := \frac{N_4 - BJ}{N_4}$ $BM := \frac{N_5}{AB - HJ}$

$AM := \sqrt{AB^2 + BM^2}$ $FM := \frac{BM \cdot (BM + AD)}{AM}$

$AF := AM - FM$ $AE := \frac{AF}{AM}$ $EF := \frac{BM \cdot AF}{AM}$

$R := \frac{EF}{AB - AE}$ $R = 0.17611$



$N_1 = 2.00000$ $N_4 = 3.00000$

$N_2 = 5.00000$ $N_5 = 0.30000$

$N_3 = 4.00000$ $R = -1.83684$

$\frac{(N_1+N_2)\cdot(N_3\cdot((N_1+N_2)-(N_2\cdot N_3))-N_2\cdot N_4\cdot N_5\cdot(N_3^2+1))}{N_4\cdot N_5\cdot(N_1+N_2)^2\cdot(N_3^2+1)+N_2\cdot N_3\cdot((N_1+N_2)-(N_2\cdot N_3))} - R = 0.00000$

Definitions.

$$R - \frac{AD \cdot N_3^2 - N_3 + AD \cdot N_4 \cdot N_5 + AD \cdot N_3^2 \cdot N_4 \cdot N_5}{AD^2 \cdot N_3^2 - AD \cdot N_3 - N_4 \cdot N_5 \cdot N_3^2 - N_4 \cdot N_5} = 0$$

$$R - \frac{(N_1 + N_2) \cdot \left[N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3) - N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)\right]}{N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3^2 + 1) + N_2 \cdot N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

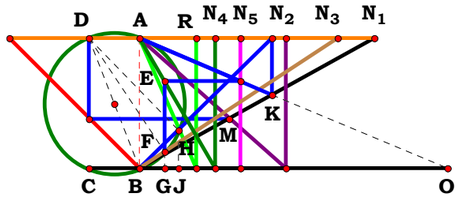
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A + B) \cdot \left[E \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot (C^2 + N_u^2)\right]\right]}{E \cdot A \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + N_u \cdot (C^2 + N_u^2) \cdot (A + B)^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{(V \cdot m + W \cdot l) \cdot \left[X \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n) - W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)\right]}{Y \cdot Z \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l)^2 + W \cdot X \cdot l \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST5AB4R2



$N_1 = 1.79896$
$N_2 = 1.12096$
$N_3 = 1.52280$
$N_4 = 0.58092$
$N_5 = 0.77486$
$R = 0.43271$

Unit. $AB := 1$ Given. $N_1 := 1.79896$ $N_2 := 1.12096$ $N_3 := 1.52280$

$N_4 := .58092$ $N_5 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

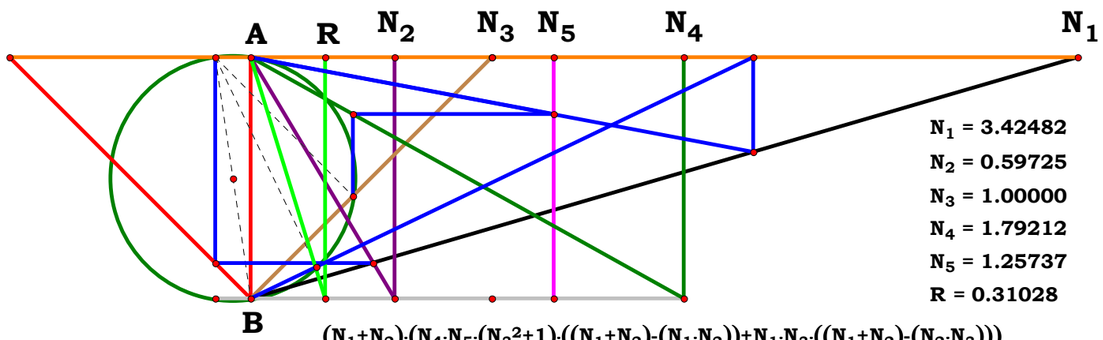
$AD := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BO := \frac{N_5}{AB - EG}$ $AK := \frac{BO \cdot N_1}{BO + N_1}$ $BK := \sqrt{AB^2 + AK^2}$

$HK := \frac{AK \cdot (AK + AD)}{BK}$ $BH := BK - HK$ $BJ := \frac{AK \cdot BH}{BK}$

$HJ := \frac{BJ}{AK}$ $R := \frac{BJ}{AB - HJ}$ $R = 0.432714$



$N_1 = 3.42482$
$N_2 = 0.59725$
$N_3 = 1.00000$
$N_4 = 1.79212$
$N_5 = 1.25737$
$R = 0.31028$

$$\frac{(N_1+N_2)\cdot(N_4\cdot N_5\cdot(N_3^2+1)\cdot((N_1+N_2)-(N_1\cdot N_2))+N_1\cdot N_3\cdot((N_1+N_2)-(N_2\cdot N_3)))}{N_4\cdot N_5\cdot(N_1+N_2)\cdot(N_3^2+1)\cdot(N_1^2+(N_1\cdot N_2)+N_2)+N_1\cdot N_2\cdot N_3\cdot((N_1+N_2)-(N_2\cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{N_1\cdot N_3 + N_4\cdot N_5 - AD\cdot N_1\cdot N_3^2 + N_3^2\cdot N_4\cdot N_5 - AD\cdot N_1\cdot N_4\cdot N_5 - AD\cdot N_1\cdot N_3^2\cdot N_4\cdot N_5}{AD\cdot N_3^2\cdot N_4\cdot N_5 - AD^2\cdot N_1\cdot N_3^2 + AD\cdot N_1\cdot N_3 + AD\cdot N_4\cdot N_5 + N_1\cdot N_3^2\cdot N_4\cdot N_5 + N_1\cdot N_4\cdot N_5} = 0$$

$$R - \frac{(N_1+N_2)\cdot\left[N_4\cdot(N_3^2+1)\cdot(N_1+N_2-N_1\cdot N_2)\cdot N_5 + N_1\cdot N_3\cdot(N_1+N_2-N_2\cdot N_3)\right]}{N_4\cdot N_5\cdot(N_1+N_2)\cdot(N_3^2+1)\cdot(N_1^2+N_1\cdot N_2+N_2) + N_1\cdot N_2\cdot N_3\cdot(N_1+N_2-N_2\cdot N_3)} = 0$$

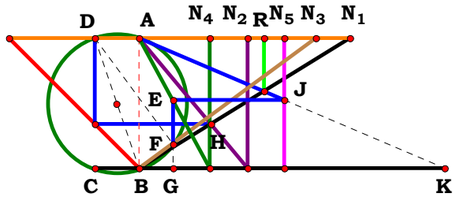
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B) - A\cdot N_u\right] + A\cdot(C^2+N_u^2)\cdot(A+B-N_u)\right]}{E\cdot A\cdot D\cdot\left[C\cdot(A+B) - A\cdot N_u\right] + (A+B)\cdot\left[A^2 + N_u\cdot(A+B)\right]\cdot(C^2+N_u^2)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{(V\cdot m + W\cdot l)\cdot\left[Y\cdot Z\cdot l\cdot(X^2+n^2)\cdot(V\cdot m - V\cdot W + W\cdot l) + V\cdot X\cdot o\cdot p\cdot(V\cdot m\cdot n - W\cdot X\cdot l + W\cdot l\cdot n)\right]}{Y\cdot Z\cdot(m\cdot V^2 + W\cdot V\cdot l + W\cdot l^2)\cdot(V\cdot m + W\cdot l)\cdot(X^2+n^2) + V\cdot W\cdot X\cdot l\cdot o\cdot p\cdot(V\cdot m\cdot n - W\cdot X\cdot l + W\cdot l\cdot n)} = 0$$

4RST5AB4R3



$N_1 = 1.61493$
$N_2 = 0.83038$
$N_3 = 1.35815$
$N_4 = 0.54218$
$N_5 = 1.11387$
$R = 0.95676$

Unit. $AB := 1$ Given. $N_1 := 1.61493$ $N_2 := .83038$ $N_3 := 1.35815$

$N_4 := .54218$ $N_5 := 1.11387$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

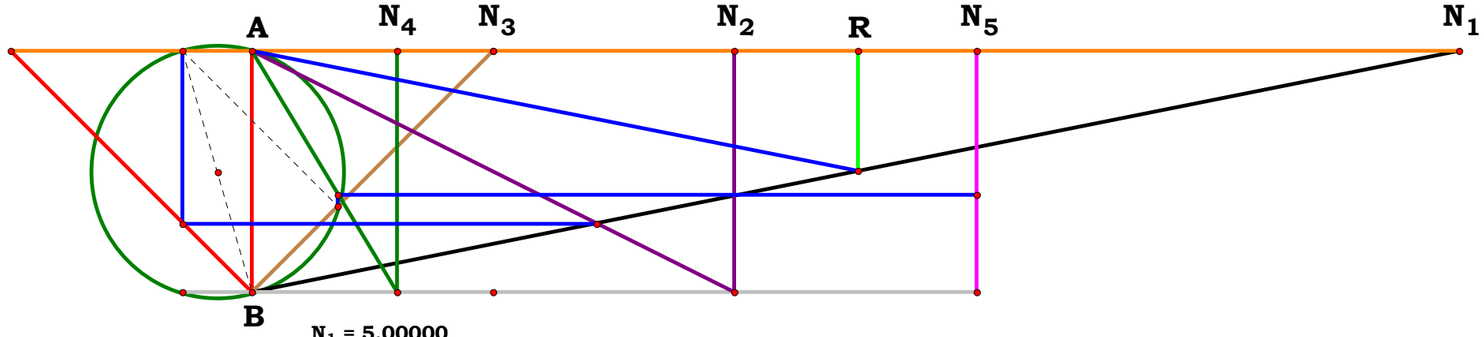
Descriptions.

$AD := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BK := \frac{N_5}{AB - EG}$ $R := \frac{BK \cdot N_1}{BK + N_1}$ $R = 0.956762$



$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.60000$
$N_5 = 3.00000$
$R = 2.50996$

$$\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1)}{N_4 \cdot N_5 \cdot (N_3^2+1) \cdot (N_1+N_2) + N_1 \cdot N_3 \cdot ((N_1+N_2) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 + N_2) + N_1 \cdot N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

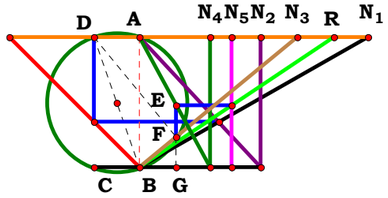
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{E \cdot D \cdot [C \cdot (A + B) - A \cdot N_u] + A \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{Y \cdot Z \cdot l \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + V \cdot X \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST5AB4R4



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.21286$
$N_4 = 0.54218$
$N_5 = 0.70706$
$R = 1.48884$

Descriptions.

$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2} \qquad FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BF := BN_3 - FN_3 \qquad BG := \frac{N_3 \cdot BF}{BN_3}$$

$$EG := \frac{N_4 - BG}{N_4} \qquad R := \frac{N_5}{EG} \qquad R = 1.489541$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3{}^2 + 1)}{N_4 - N_3 + N_3{}^2 \cdot N_4 + AD \cdot N_3{}^2} = 0$$

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{(N_3{}^2 + 1) \cdot (N_1 + N_2) \cdot N_4 - N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u{}^2) \cdot (A + B)}{E \cdot [C^2 \cdot (A + B) + N_u{}^2 \cdot (A + B) - D \cdot [C \cdot (A + B) - A \cdot N_u]]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

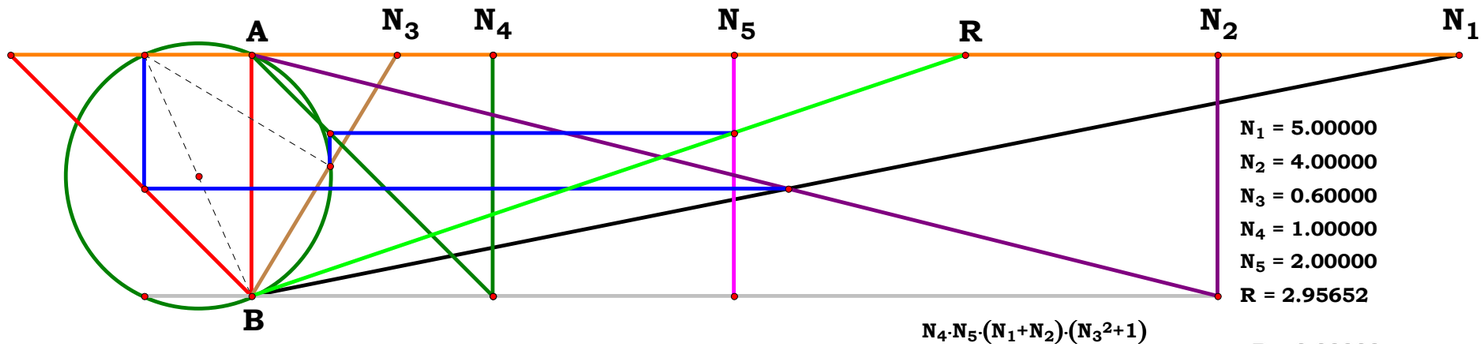
$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{p \cdot [Y \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + X \cdot o \cdot (W \cdot X \cdot l - V \cdot m \cdot n - W \cdot l \cdot n)]} = 0$$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.21228$

$N_4 := .54218$ $N_5 := .70706$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

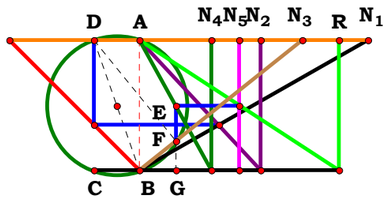
$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 0.60000$
$N_4 = 1.00000$
$N_5 = 2.00000$
$R = 2.95652$

$$\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_4 \cdot (N_3{}^2 + 1) \cdot (N_1 + N_2) - N_3 \cdot ((N_1 + N_2) - N_2 \cdot N_3)} - R = 0.00000$$

4RST5AB4R5



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.25160$
$N_4 = 0.55186$
$N_5 = 0.76518$
$R = 1.52823$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.25160$

$N_4 := .55186$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_2}{N_1 + N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2}$$

$$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3} \qquad BF := BN_3 - FN_3$$

$$BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$R := \frac{N_5}{AB - EG} \qquad R = 1.52823$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3{}^2 + 1)}{N_3 - AD \cdot N_3{}^2} = 0$$

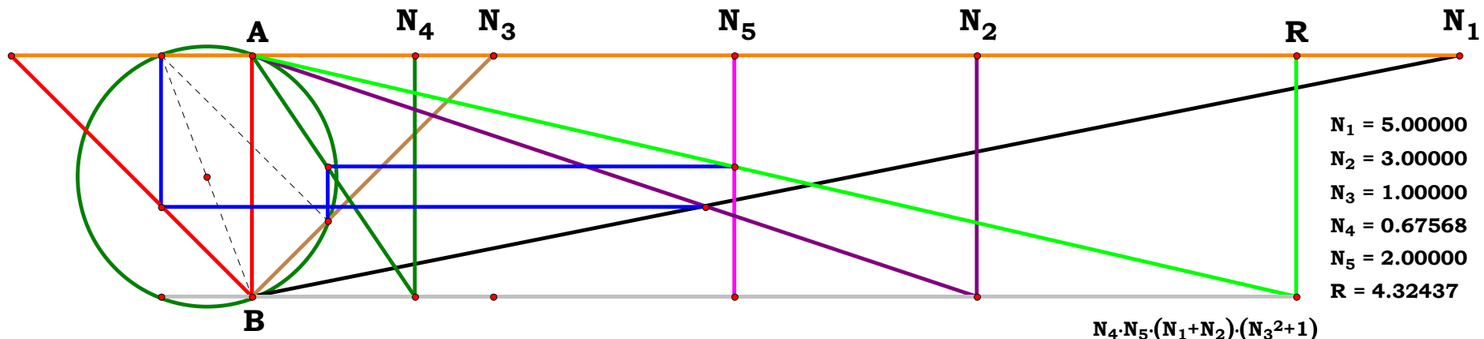
$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3{}^2 + 1)}{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot (C^2 + N_u{}^2) \cdot (A + B)}{D \cdot E \cdot [C \cdot (A + B) - A \cdot N_u]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

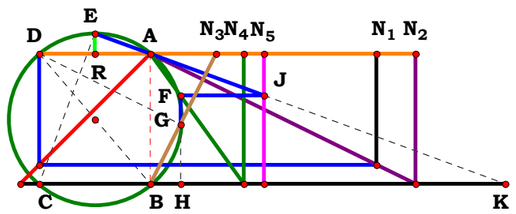
$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{o \cdot p \cdot (V \cdot X \cdot m \cdot n - W \cdot X^2 \cdot l + W \cdot X \cdot l \cdot n)} = 0$$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.67568$
$N_5 = 2.00000$
$R = 4.32437$

$\frac{N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3{}^2+1)}{N_3 \cdot ((N_1+N_2)-N_2 \cdot N_3)} - R = 0.00000$

4RST5AB5R0



$N_1 = 1.73116$
$N_2 = 2.03142$
$N_3 = 0.50580$
$N_4 = 0.71652$
$N_5 = 0.87172$
$R = -0.42774$

Unit. $AB := 1$ **Given.** $N_1 := 1.73116$ $N_2 := 2.03142$ $N_3 := .50580$

$N_4 := .71652$ $N_5 := .87172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

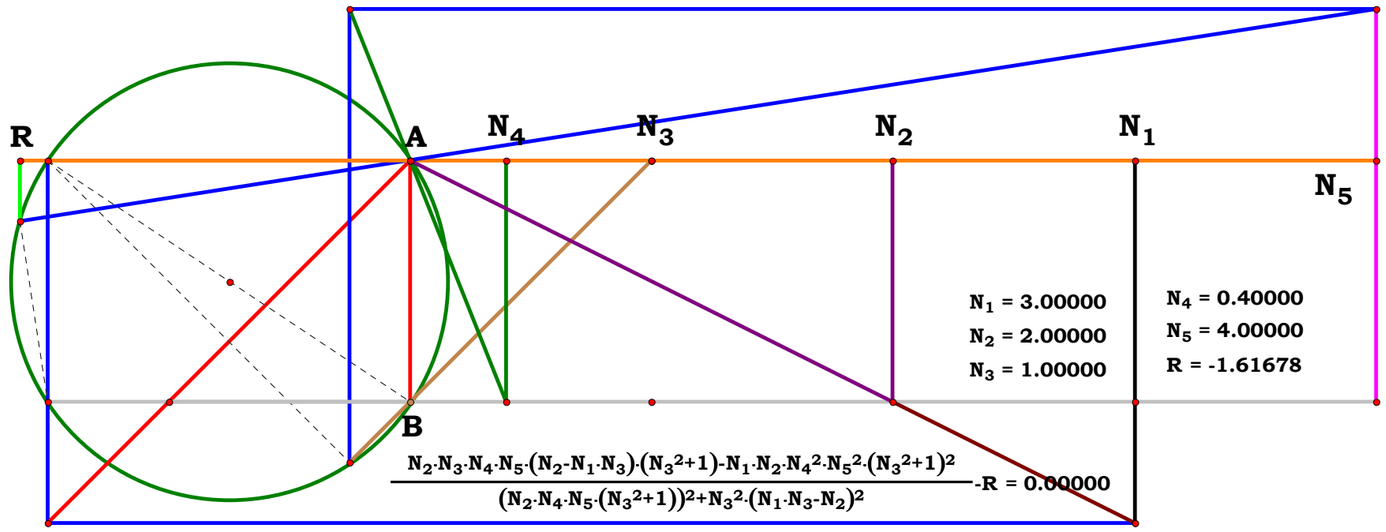
$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $GN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BG := BN_3 - GN_3$ $BH := \frac{N_3 \cdot BG}{BN_3}$ $FH := \frac{N_4 - BH}{N_4}$

$BK := \frac{N_5}{AB - FH}$ $AK := \sqrt{AB^2 + BK^2}$ $EK := \frac{BK \cdot (BK + AD)}{AK}$

$AE := AK - EK$ $R := \frac{BK \cdot AE}{AK}$ $R = -0.427738$

Definitions.



$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_3 - AD \cdot N_3^2 - AD \cdot N_4 \cdot N_5 - AD \cdot N_3^2 \cdot N_4 \cdot N_5)}{AD^2 \cdot N_3^4 - 2 \cdot AD \cdot N_3^3 + N_3^4 \cdot N_4^2 \cdot N_5^2 + 2 \cdot N_3^2 \cdot N_4^2 \cdot N_5^2 + N_3^2 + N_4^2 \cdot N_5^2} = 0$$

$$R - \frac{N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_3^2 + 1) - N_1 \cdot N_2 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2 + 1)^2}{N_2^2 \cdot N_4^2 \cdot N_5^2 \cdot (N_3^2 + 1)^2 + N_3^2 \cdot (N_1 \cdot N_3 - N_2)^2} = 0$$

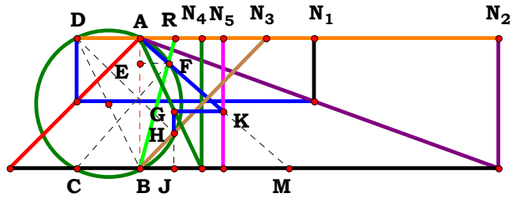
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2) \cdot [E \cdot D \cdot (A \cdot C - B \cdot N_u) - [B \cdot N_u \cdot (C^2 + N_u^2)]]}{E^2 \cdot D^2 \cdot (A \cdot C - B \cdot N_u)^2 + A^2 \cdot N_u^2 \cdot (C^2 + N_u^2)^2} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2) \cdot [X \cdot o \cdot p \cdot (W \cdot l \cdot n - V \cdot X \cdot m) - V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)]}{Y^2 \cdot W^2 \cdot Z^2 \cdot l^2 \cdot (X^2 + n^2)^2 + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot l \cdot n)^2} = 0$$

4RST5AB5R1



$N_1 = 1.33405$
$N_2 = 2.74817$
$N_3 = 0.97071$
$N_4 = 0.47437$
$N_5 = 0.63926$
$R = 0.27129$

Unit. $AB := 1$ Given. $N_1 := 1.33405$ $N_2 := 2.74817$ $N_3 := .97071$

$N_4 := .47437$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BH := BN_3 - HN_3$

$BJ := \frac{N_3 \cdot BH}{BN_3}$ $HJ := \frac{N_4 - BJ}{N_4}$ $BM := \frac{N_5}{AB - HJ}$

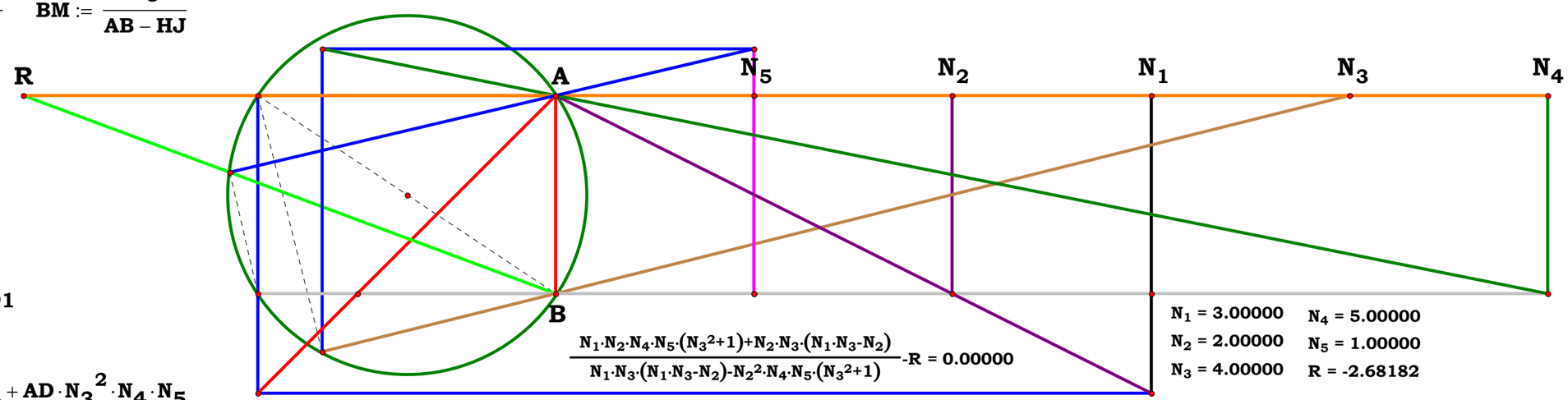
$AM := \sqrt{AB^2 + BM^2}$

$FM := \frac{BM \cdot (BM + AD)}{AM}$

$AF := AM - FM$

$AE := \frac{AF}{AM}$ $EF := \frac{BM \cdot AF}{AM}$

$R := \frac{EF}{AB - AE}$ $R = 0.271291$



Definitions.

$$R - \frac{AD \cdot N_3^2 - N_3 + AD \cdot N_4 \cdot N_5 + AD \cdot N_3^2 \cdot N_4 \cdot N_5}{AD^2 \cdot N_3^2 - AD \cdot N_3 - N_4 \cdot N_5 \cdot N_3^2 - N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + N_2 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2)}{N_1 \cdot N_3 \cdot (N_1 \cdot N_3 - N_2) - N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)} = 0$$

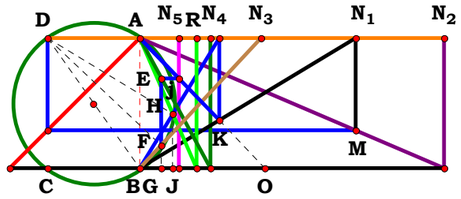
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot \left[E \cdot D \cdot (A \cdot C - B \cdot N_u) - \left[B \cdot N_u \cdot (C^2 + N_u^2)\right]\right]}{E \cdot B \cdot D \cdot (A \cdot C - B \cdot N_u) + A^2 \cdot N_u \cdot (C^2 + N_u^2)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot l \cdot \left[Y \cdot V \cdot Z \cdot m \cdot (X^2 + n^2) + X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)\right]}{\left[V \cdot X \cdot m \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n) - Y \cdot W^2 \cdot Z \cdot l^2 \cdot (X^2 + n^2)\right]} = 0$$

4RST5AB5R2



$N_1 = 1.65368$
$N_2 = 2.33168$
$N_3 = 0.93197$
$N_4 = 0.54218$
$N_5 = 0.30026$
$R = 0.43139$

Unit. $AB := 1$ **Given.** $N_1 := 1.65368$ $N_2 := 2.33168$ $N_3 := .93197$

$N_4 := .54218$ $N_5 := .30026$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

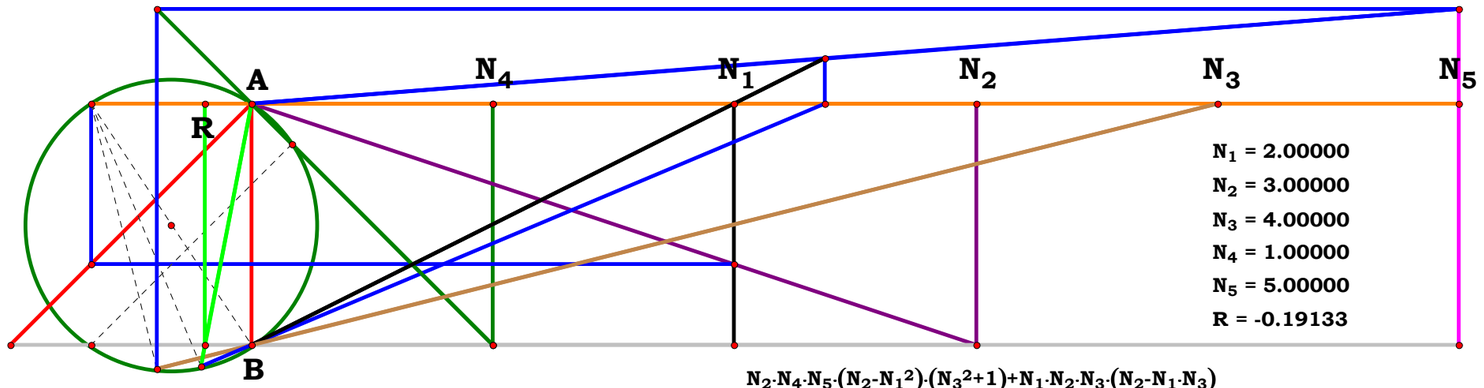
$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BO := \frac{N_5}{AB - EG}$ $AK := \frac{BO \cdot N_1}{BO + N_1}$ $BK := \sqrt{AB^2 + AK^2}$

$HK := \frac{AK \cdot (AK + AD)}{BK}$ $BH := BK - HK$ $BJ := \frac{AK \cdot BH}{BK}$

$HJ := \frac{BJ}{AK}$ $R := \frac{BJ}{AB - HJ}$ $R = 0.431384$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$N_5 = 5.00000$
$R = -0.19133$

$$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_2 - N_1^2) \cdot (N_3^2 + 1) + N_1 \cdot N_2 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)}{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 + 1) \cdot (N_3^2 + 1) + N_1^2 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 \cdot N_4 \cdot N_5}{N_4 \cdot N_5 \cdot AD \cdot N_3^2 - N_1 \cdot AD^2 \cdot N_3^2 + N_1 \cdot AD \cdot N_3 + N_4 \cdot N_5 \cdot AD + N_1 \cdot N_4 \cdot N_5 \cdot N_3^2 + N_1 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_2 - N_1^2) \cdot (N_3^2 + 1) + N_1 \cdot N_2 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)}{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_2 + 1) \cdot (N_3^2 + 1) + N_1^2 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)} = 0$$

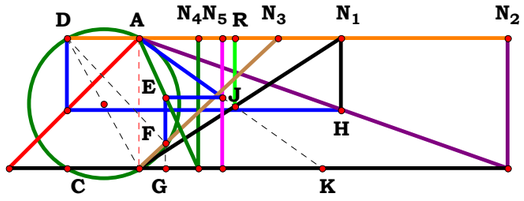
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{E \cdot A \cdot D \cdot (A \cdot C - B \cdot N_u) + A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u)}{E \cdot B \cdot D \cdot (A \cdot C - B \cdot N_u) + A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot W \cdot Z \cdot l \cdot (X^2 + n^2) \cdot (W \cdot l^2 - V^2 \cdot m) - V \cdot W \cdot X \cdot l \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)}{Y \cdot V \cdot W \cdot Z \cdot l^2 \cdot (X^2 + n^2) \cdot (W + m) - V^2 \cdot X \cdot m \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)} = 0$$

4RST5AB5R3



$N_1 = 1.54713$
$N_2 = 2.82566$
$N_3 = 1.06757$
$N_4 = 0.45500$
$N_5 = 0.63926$
$R = 0.73582$

Unit. $AB := 1$ Given. $N_1 := 1.54713$ $N_2 := 2.82566$ $N_3 := 1.06757$

$N_4 := .455$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

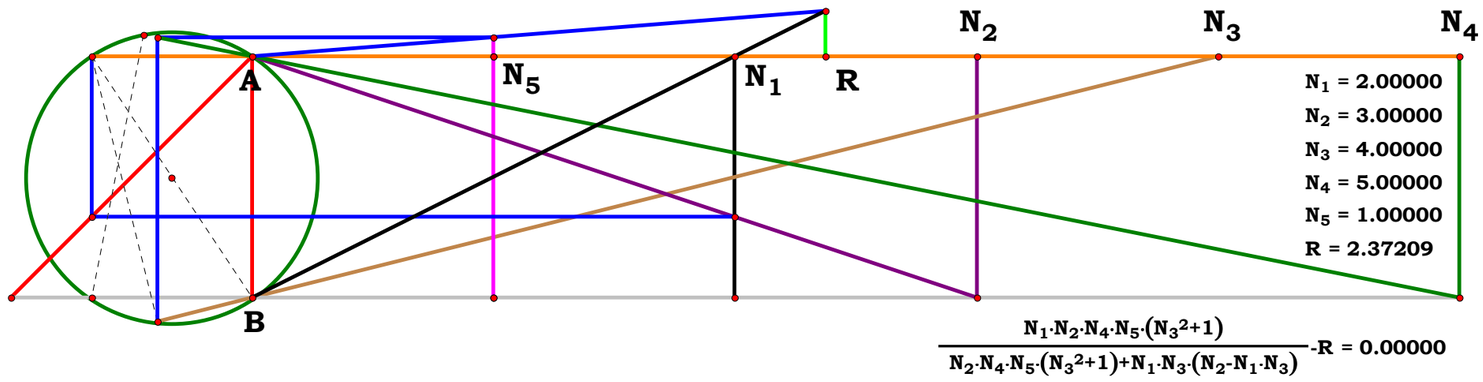
Descriptions.

$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BK := \frac{N_5}{AB - EG}$ $R := \frac{BK \cdot N_1}{BK + N_1}$ $R = 0.735811$



$\frac{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) + N_1 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot (N_2 - N_1 \cdot N_3)} = 0$$

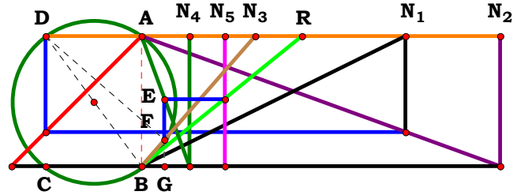
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{A^2 \cdot (C^2 + N_u^2) + D \cdot E \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{Y \cdot W \cdot Z \cdot l^2 \cdot (X^2 + n^2) - V \cdot X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot l \cdot n)} = 0$$

4RST5AB5R4



$N_1 = 2.02174$
$N_2 = 2.74817$
$N_3 = 0.87386$
$N_4 = 0.36783$
$N_5 = 0.63926$
$R = 1.23191$

Unit. $AB := 1$ Given. $N_1 := 2.02174$ $N_2 := 2.74817$ $N_3 := .87386$

$N_4 := .36783$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

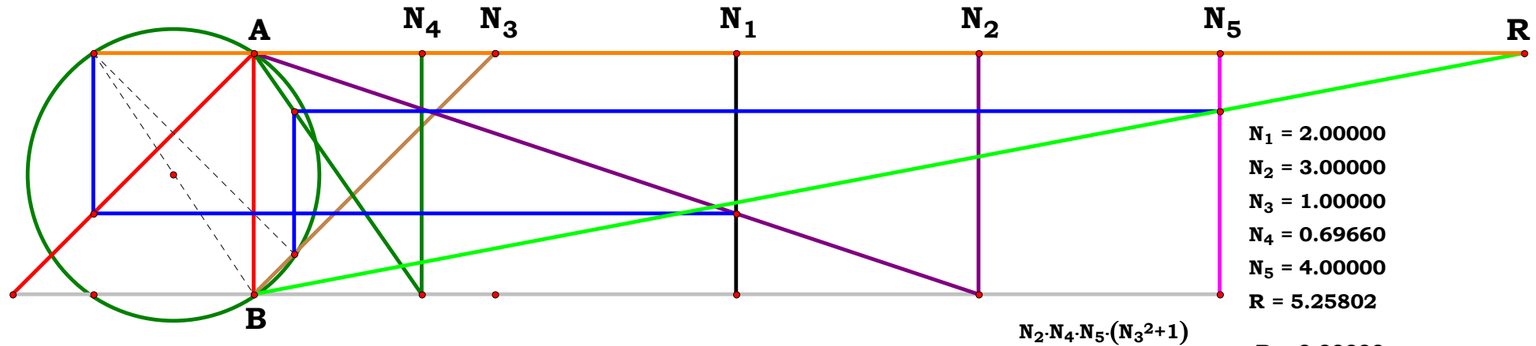
Descriptions.

$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$R := \frac{N_5}{EG}$ $R = 1.231892$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.69660$
$N_5 = 4.00000$
$R = 5.25802$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_4 \cdot (N_2 \cdot N_3^2+N_2)+(N_1 \cdot N_3-N_2)} - R = 0.00000$

Definitions.

$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_4 - N_3 + N_3^2 \cdot N_4 + AD \cdot N_3^2} = 0$

$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_2 \cdot N_3^2 + N_2) \cdot N_4 + N_3 \cdot (N_1 \cdot N_3 - N_2)} = 0$

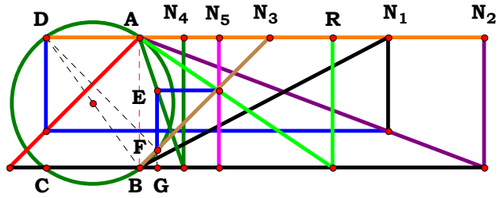
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [A \cdot C \cdot (C - D) + N_u \cdot (B \cdot D + A \cdot N_u)]} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Y \cdot Z \cdot 1 \cdot (X^2 + n^2)}{p \cdot [Y \cdot W \cdot 1 \cdot (X^2 + n^2) + X \cdot o \cdot (V \cdot X \cdot m - W \cdot 1 \cdot n)]} = 0$

4RST5AB5R5



$N_1 = 1.90551$
$N_2 = 2.64163$
$N_3 = 0.99977$
$N_4 = 0.33877$
$N_5 = 0.61020$
$R = 1.48279$

Unit. $AB := 1$ **Given.** $N_1 := 1.90551$ $N_2 := 2.64163$ $N_3 := .99977$

$N_4 := .33877$ $N_5 := .61020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

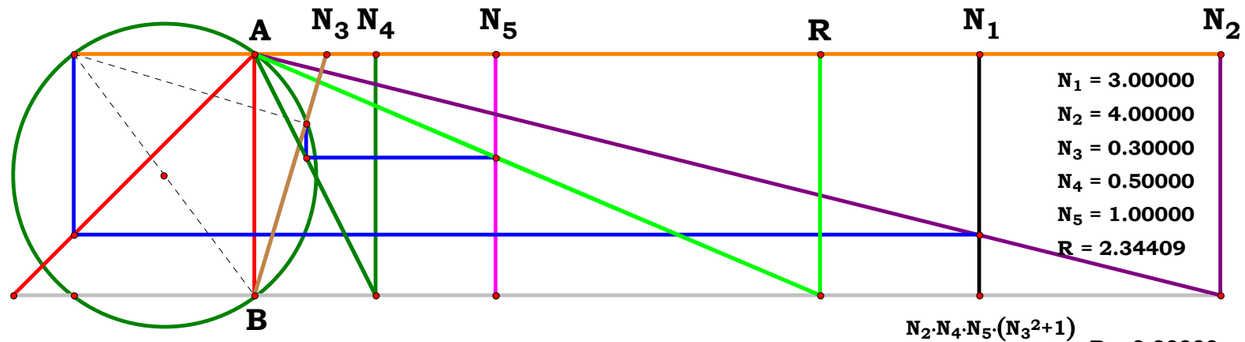
Descriptions.

$AD := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$ $BF := BN_3 - FN_3$

$BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$R := \frac{N_5}{AB - EG}$ $R = 1.482764$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.30000$
$N_4 = 0.50000$
$N_5 = 1.00000$
$R = 2.34409$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 - AD \cdot N_3^2} = 0$

$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} = 0$

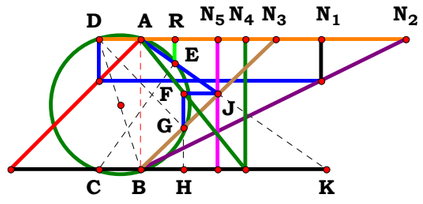
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot (A \cdot C \cdot D - B \cdot D \cdot N_u)} = 0$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{X \cdot o \cdot p \cdot (W \cdot l \cdot n - V \cdot X \cdot m)} = 0$

4RST5AB6R0



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.03851$
$N_4 = 0.80369$
$N_5 = 0.59083$
$R = 0.25675$

Descriptions.

$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2} \qquad GN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BG := BN_3 - GN_3 \qquad BH := \frac{N_3 \cdot BG}{BN_3} \qquad FH := \frac{N_4 - BH}{N_4}$$

$$BK := \frac{N_5}{AB - FH} \qquad AK := \sqrt{AB^2 + BK^2} \qquad EK := \frac{BK \cdot (BK + AD)}{AK}$$

$$AE := AK - EK \qquad R := \frac{BK \cdot AE}{AK} \qquad R = 0.256747$$

Definitions.

$$R - \frac{N_2 \cdot N_4{}^2 \cdot N_5{}^2 \cdot \left(N_3{}^2 + 1\right)^2 \cdot \left(N_1 - N_2\right) + N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot \left(N_3{}^2 + 1\right) \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)}{N_2{}^2 \cdot N_4{}^2 \cdot N_5{}^2 \cdot \left(N_3{}^2 + 1\right)^2 + N_3{}^2 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)^2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right] - N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A - B)\Big]}{E^2 \cdot D^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2} = 0$$

$$N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

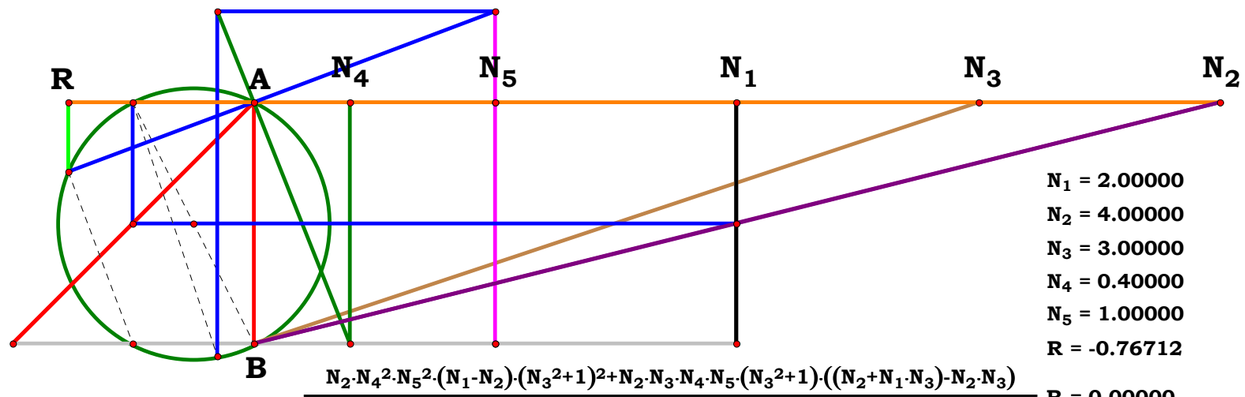
$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot \left(X^2 + n^2\right) \cdot \left[Y \cdot Z \cdot \left(X^2 + n^2\right) \cdot (V \cdot m - W \cdot l) + X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)\right]}{Y^2 \cdot W^2 \cdot Z^2 \cdot l^2 \cdot \left(X^2 + n^2\right)^2 + X^2 \cdot o^2 \cdot p^2 \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)^2} = 0$$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.03851$

$N_4 := .80369$ $N_5 := .59083$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

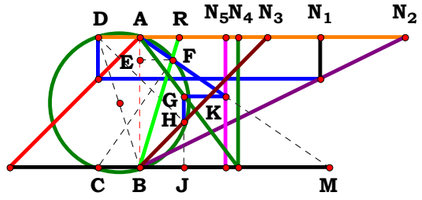
$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 0.40000$
$N_5 = 1.00000$
$R = -0.76712$

$$\frac{N_2 \cdot N_4{}^2 \cdot N_5{}^2 \cdot (N_1 - N_2) \cdot (N_3{}^2 + 1)^2 + N_2 \cdot N_3 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{(N_2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1))^2 + N_3{}^2 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)^2} - R = 0.00000$$

4RST5AB6R1



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.98040$
$N_4 = 0.75526$
$N_5 = 0.65863$
$R = 0.30377$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .98040$

$N_4 := .75526$ $N_5 := .65863$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

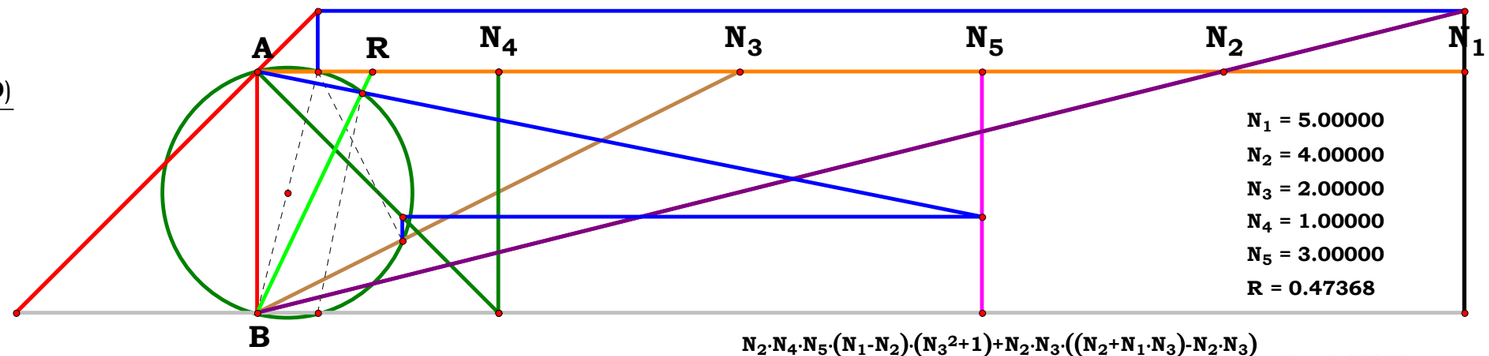
$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3{}^2} \qquad HN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BH := BN_3 - HN_3 \qquad BJ := \frac{N_3 \cdot BH}{BN_3} \qquad HJ := \frac{N_4 - BJ}{N_4}$$

$$BM := \frac{N_5}{AB - HJ} \qquad AM := \sqrt{AB^2 + BM^2} \qquad FM := \frac{BM \cdot (BM + AD)}{AM}$$

$$AF := AM - FM \qquad AE := \frac{AF}{AM} \qquad EF := \frac{BM \cdot AF}{AM}$$

$$R := \frac{EF}{AB - AE} \qquad R = 0.303773$$



$$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2) \cdot (N_3{}^2 + 1) + N_2 \cdot N_3 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{N_2{}^2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) - N_3{}^2 \cdot (N_1 - N_2)^2 - N_2 \cdot N_3 \cdot (N_1 - N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{AD \cdot N_3{}^2 - N_3 + AD \cdot N_4 \cdot N_5 + AD \cdot N_3{}^2 \cdot N_4 \cdot N_5}{AD^2 \cdot N_3{}^2 - AD \cdot N_3 - N_4 \cdot N_5 \cdot N_3{}^2 - N_4 \cdot N_5} = 0$$

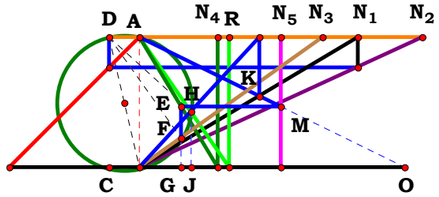
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) \cdot (N_1 - N_2) + N_2 \cdot N_3 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)}{N_2{}^2 \cdot N_4 \cdot N_5 \cdot (N_3{}^2 + 1) - N_3{}^2 \cdot (N_1 - N_2)^2 - N_2 \cdot N_3 \cdot (N_1 - N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0 \qquad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{E \cdot A \cdot D \cdot [A \cdot C - N_u \cdot (A - B)] - A \cdot N_u \cdot (C^2 + N_u{}^2) \cdot (A - B)}{E \cdot D \cdot (A - B) \cdot [A \cdot C - N_u \cdot (A - B)] + A^2 \cdot N_u \cdot (C^2 + N_u{}^2)} = 0 \qquad N_1 - \frac{V}{l} = 0 \qquad N_2 - \frac{W}{m} = 0 \qquad N_3 - \frac{X}{n} = 0 \qquad N_4 - \frac{Y}{o} = 0 \qquad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot l \cdot [Y \cdot Z \cdot (X^2 + n^2) \cdot (V \cdot m - W \cdot l) + X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)]}{Y \cdot W^2 \cdot Z \cdot l^2 \cdot (X^2 + n^2) - X \cdot o \cdot p \cdot (V \cdot m - W \cdot l) \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST5AB6R2



$N_1 = 1.67305$
$N_2 = 2.16702$
$N_3 = 1.40657$
$N_4 = 0.60029$
$N_5 = 1.08481$
$R = 0.69075$

Unit. $AB := 1$ Given. $N_1 := 1.67305$ $N_2 := 2.16702$ $N_3 := 1.40657$

$N_4 := .60029$ $N_5 := 1.08481$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

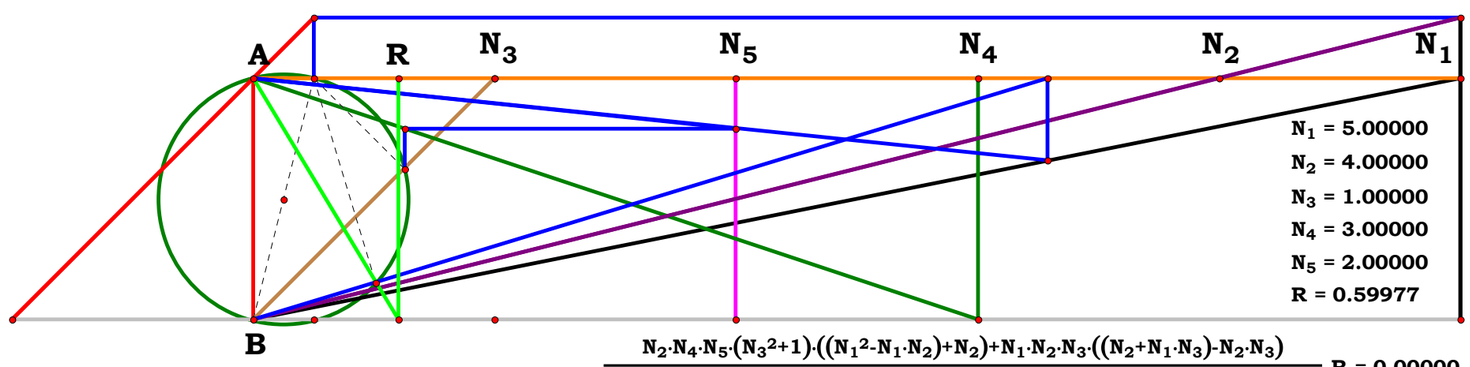
$AD := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BO := \frac{N_5}{AB - EG}$ $AK := \frac{BO \cdot N_1}{BO + N_1}$ $BK := \sqrt{AB^2 + AK^2}$

$HK := \frac{AK \cdot (AK + AD)}{BK}$ $BH := BK - HK$ $BJ := \frac{AK \cdot BH}{BK}$

$HJ := \frac{BJ}{AK}$ $R := \frac{BJ}{AB - HJ}$ $R = 0.690754$



$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot ((N_1^2 - N_1 \cdot N_2) + N_2) + N_1 \cdot N_2 \cdot N_3 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) \cdot ((N_2 - N_1) + N_1 \cdot N_2) - N_1 \cdot N_3 \cdot (N_1 - N_2) \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 \cdot N_4 \cdot N_5}{AD \cdot N_3^2 \cdot N_4 \cdot N_5 - AD^2 \cdot N_1 \cdot N_3^2 + AD \cdot N_1 \cdot N_3 + AD \cdot N_4 \cdot N_5 + N_1 \cdot N_3^2 \cdot N_4 \cdot N_5 + N_1 \cdot N_4 \cdot N_5} = 0$$

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1^2 - N_1 \cdot N_2 + N_2) + N_1 \cdot N_2 \cdot N_3 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_2 - N_1 + N_1 \cdot N_2) - N_1 \cdot N_3 \cdot (N_1 - N_2) \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

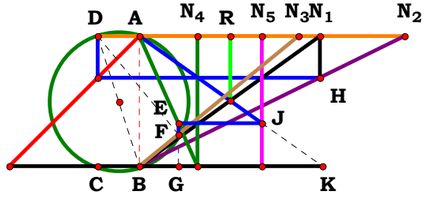
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{E \cdot A \cdot D \cdot [A \cdot C - N_u \cdot (A - B)] + A \cdot (C^2 + N_u^2) \cdot [A^2 - N_u \cdot (A - B)]}{E \cdot D \cdot (A - B) \cdot [A \cdot C - N_u \cdot (A - B)] + A^2 \cdot (C^2 + N_u^2) \cdot (A - B + N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot W \cdot Z \cdot 1 \cdot (X^2 + n^2) \cdot (m \cdot V^2 - W \cdot V \cdot 1 + W \cdot 1^2) + V \cdot W \cdot X \cdot 1 \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot 1 + W \cdot 1 \cdot n)}{Y \cdot W \cdot Z \cdot 1^2 \cdot (X^2 + n^2) \cdot (V \cdot W - V \cdot m + W \cdot 1) - V \cdot X \cdot o \cdot p \cdot (V \cdot m - W \cdot 1) \cdot (V \cdot X \cdot m - W \cdot X \cdot 1 + W \cdot 1 \cdot n)} = 0$$

4RST5AB6R3



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.22254$
$N_4 = 0.44532$
$N_5 = 0.93952$
$R = 0.69579$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.22254$

$N_4 := .44532$ $N_5 := .93952$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AD := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$ $FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$

$BF := BN_3 - FN_3$ $BG := \frac{N_3 \cdot BF}{BN_3}$ $EG := \frac{N_4 - BG}{N_4}$

$BK := \frac{N_5}{AB - EG}$ $R := \frac{BK \cdot N_1}{BK + N_1}$ $R = 0.695788$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_1 \cdot N_3 + N_4 \cdot N_5 - AD \cdot N_1 \cdot N_3^2 + N_3^2 \cdot N_4 \cdot N_5} = 0$$

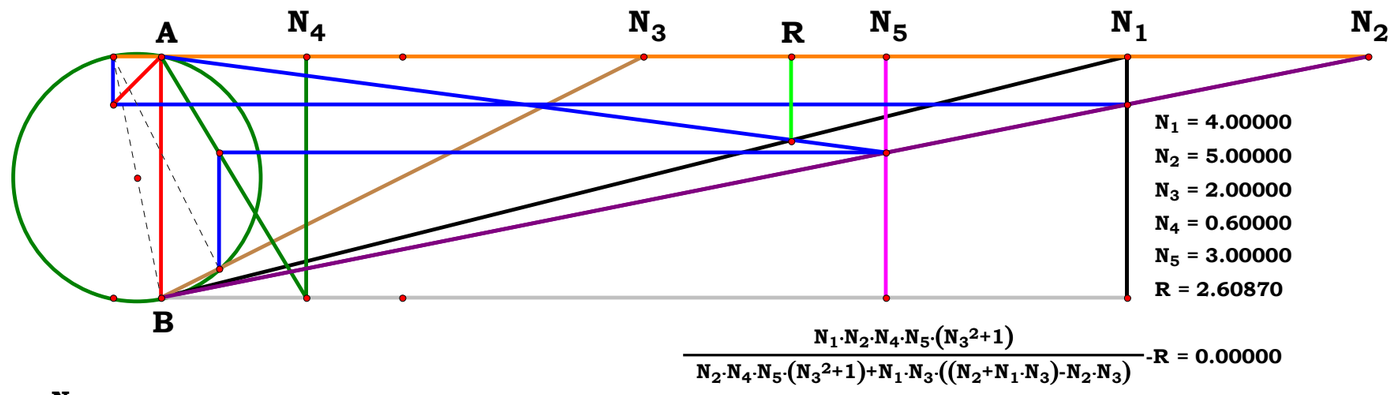
$$R - \frac{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) + N_1 \cdot N_3 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{A^2 \cdot (C^2 + N_u^2) + D \cdot E \cdot [A \cdot C - N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

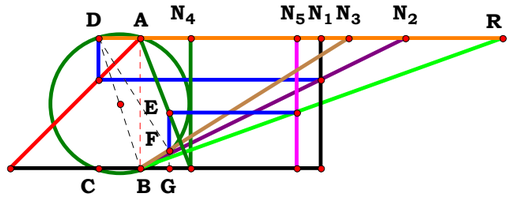
$$R - \frac{V \cdot W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{Y \cdot W \cdot Z \cdot l^2 \cdot (X^2 + n^2) + V \cdot X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$



$N_1 = 4.00000$
$N_2 = 5.00000$
$N_3 = 2.00000$
$N_4 = 0.60000$
$N_5 = 3.00000$
$R = 2.60870$

$$\frac{N_1 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) + N_1 \cdot N_3 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$$

4RST5AB6R4



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.60029$
$N_4 = 0.38720$
$N_5 = 1.20104$
$R = 2.77566$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.60029$

$N_4 := .38720$ $N_5 := 1.20104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BF := BN_3 - FN_3 \qquad BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$R := \frac{N_5}{EG} \qquad R = 2.775673$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_4 - N_3 + N_3^2 \cdot N_4 + AD \cdot N_3^2} = 0$$

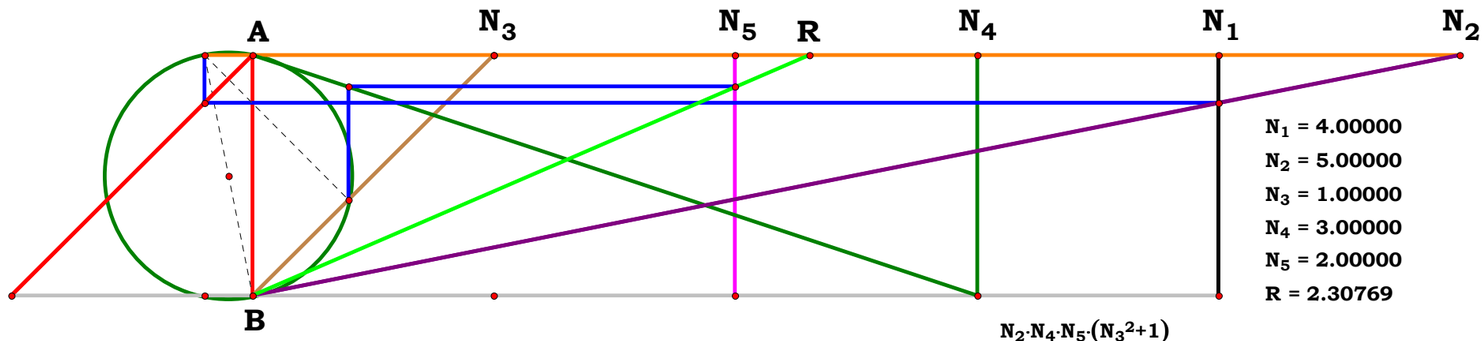
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_2 - N_1 + N_2 \cdot N_4) \cdot N_3^2 - N_2 \cdot (N_3 - N_4)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [A \cdot (C^2 - D \cdot C + N_u^2) + D \cdot N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

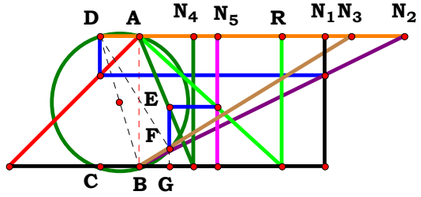
$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{p \cdot [Y \cdot W \cdot l \cdot (X^2 + n^2) - X \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)]} = 0$$



$N_1 = 4.00000$
$N_2 = 5.00000$
$N_3 = 1.00000$
$N_4 = 3.00000$
$N_5 = 2.00000$
$R = 2.30769$

$$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3^2 \cdot ((N_2 - N_1) + N_2 \cdot N_4) - N_2 \cdot (N_3 - N_4)} - R = 0.00000$$

4RST5AB6R5



$N_1 = 1.42122$
$N_2 = 2.03142$
$N_3 = 1.62935$
$N_4 = 0.41626$
$N_5 = 0.60052$
$R = 1.09820$

Unit. $AB := 1$ **Given.** $N_1 := 1.42122$ $N_2 := 2.03142$ $N_3 := 1.62935$

$N_4 := .41626$ $N_5 := .60052$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AD := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad FN_3 := \frac{N_3 \cdot (N_3 + AD)}{BN_3}$$

$$BF := BN_3 - FN_3 \qquad BG := \frac{N_3 \cdot BF}{BN_3} \qquad EG := \frac{N_4 - BG}{N_4}$$

$$R := \frac{N_5}{AB - EG} \qquad R = 1.098197$$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 - AD \cdot N_3^2} = 0$$

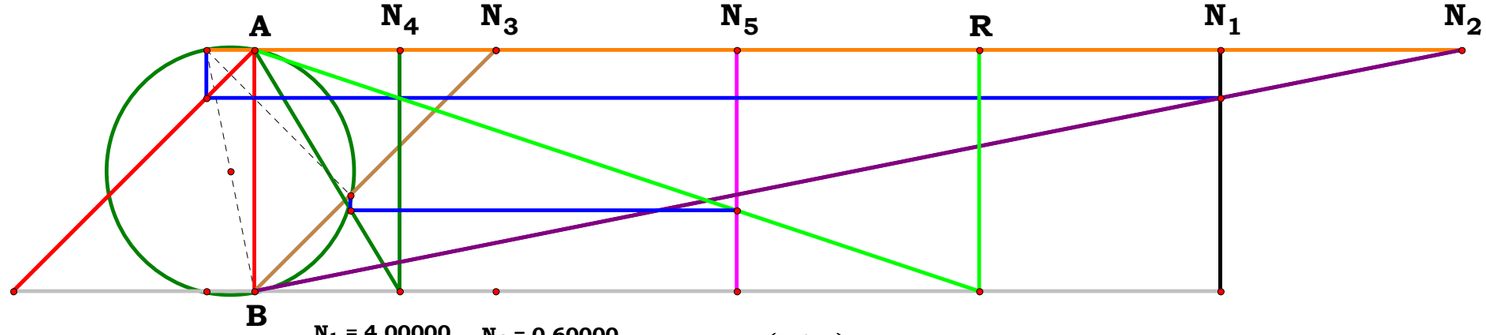
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{N_3 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{E \cdot [A \cdot C \cdot D - D \cdot N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

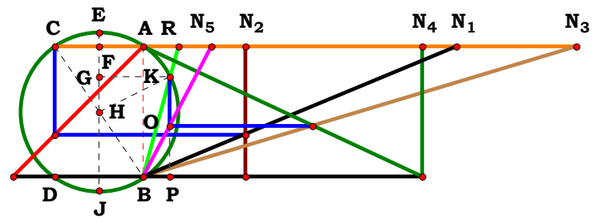


$N_1 = 4.00000$ $N_4 = 0.60000$ $\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{N_3 \cdot ((N_2+N_1 \cdot N_3)-N_2 \cdot N_3)} - R = 0.00000$

$N_2 = 5.00000$ $N_5 = 2.00000$

$N_3 = 1.00000$ $R = 3.00000$

4RST6AB1R0



$N_1 = 2.39948$
$N_2 = 0.78196$
$N_3 = 3.32436$
$N_4 = 2.14033$
$N_5 = 0.52303$
$R = 0.26797$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .78196$ $N_3 := 3.32436$

$N_4 := 2.14033$ $N_5 := .52303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

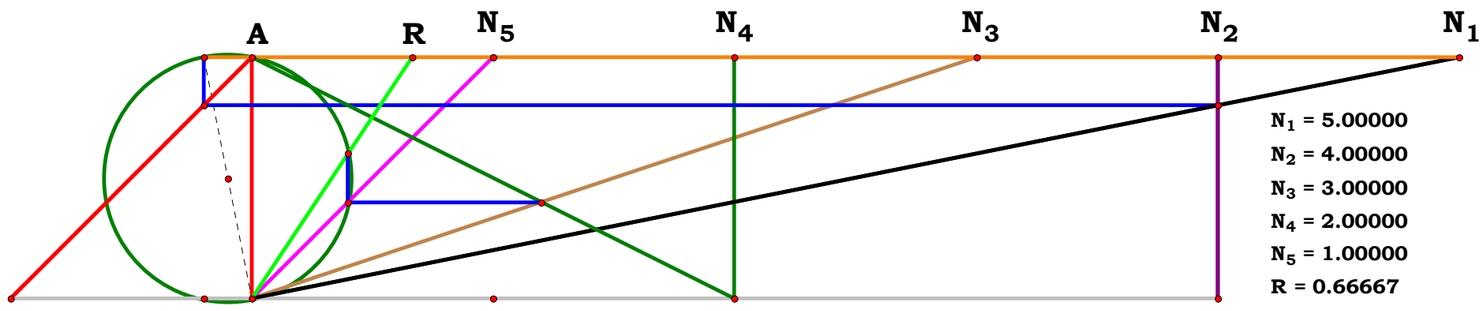
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := BP + AF$ $HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$KO := \frac{AB}{2} + GH$ $R := \frac{BP}{KO}$ $R = 0.267969$



$N_1 = 5.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$N_5 = 1.00000$
$R = 0.66667$

$\frac{2 \cdot \sqrt{N_1} \cdot N_4 \cdot N_5}{\sqrt{N_1} \cdot (N_3+N_4) + \sqrt{N_1 \cdot (N_3+N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_3+N_4) \cdot (N_1-N_2)}} - R = 0.00000$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2}}{\left[(N_3 + N_4) \cdot \left[\sqrt{(N_3 + N_4)^2 - 4 \cdot N_4 \cdot N_5 \cdot [AC \cdot (N_3 + N_4) + N_4 \cdot N_5]} + \sqrt{(N_3 + N_4)^2}\right]\right]} = 0$$

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_4 \cdot N_5}{\sqrt{N_1} \cdot (N_3 + N_4) + \sqrt{N_1 \cdot (N_3 + N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}} = 0$$

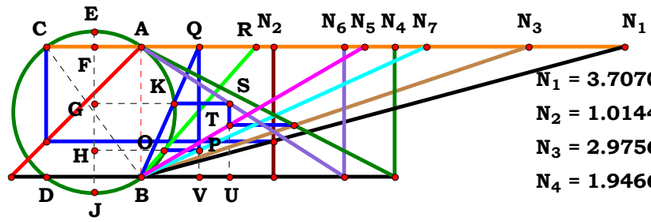
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot \left(\sqrt{N_u}\right)^3 \cdot \sqrt{B}}{\sqrt{N_u \cdot [B \cdot E^2 \cdot (C + D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^2 + 4 \cdot C \cdot E \cdot N_u \cdot (C + D) \cdot (A - B)]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C + D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{V} \cdot Y \cdot Z \cdot n \cdot \sqrt{l \cdot m}}{\sqrt{l} \cdot \sqrt{V \cdot m \cdot p^2 \cdot (X \cdot o + Y \cdot n)^2 - 4 \cdot Y \cdot Z \cdot n \cdot p \cdot (V \cdot m - W \cdot l) \cdot (X \cdot o + Y \cdot n) - 4 \cdot V \cdot Y^2 \cdot m \cdot n^2 \cdot Z^2} + \sqrt{l \cdot m} \cdot \sqrt{V} \cdot p \cdot (X \cdot o + Y \cdot n)} = 0$$

4RST6AB1R1



$N_1 = 3.70706$ $N_5 = 1.71438$
$N_2 = 1.01441$ $N_6 = 1.55941$
$N_3 = 2.97567$ $N_7 = 2.18899$
$N_4 = 1.94661$ $R = 0.88032$

Unit. $AB := 1$ **Given.** $N_1 := 3.70706$ $N_2 := 1.01441$ $N_3 := 2.97567$ $N_4 := 1.94661$
$N_5 := 1.71438$ $N_6 := 1.55941$ $N_7 := 2.18899$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4} \qquad BU := N_5 \cdot TU$$

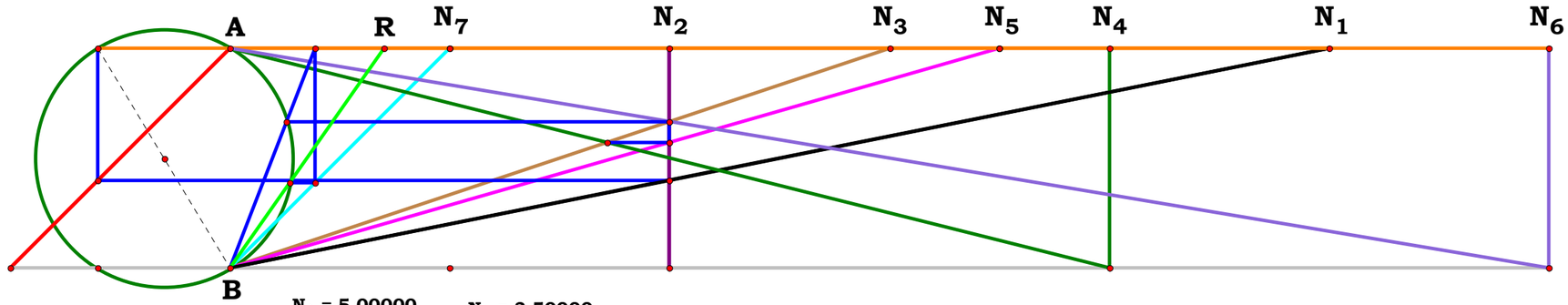
$$SU := \frac{N_6 - BU}{N_6} \qquad GJ := SU + EF$$

$$GK := \sqrt{GJ \cdot (EJ - GJ)} \qquad AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

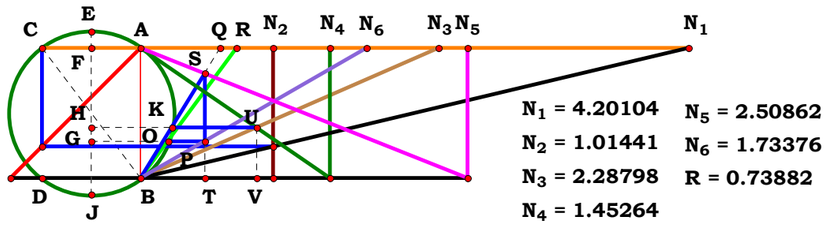
$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.880317$



$N_1 = 5.00000$ $N_5 = 3.50000$ $AB = 1.00000$ $EF = 0.08310$ $GJ = 0.74976$ $HJ = 0.47125$
$N_2 = 2.00000$ $N_6 = 6.00000$ $AC = 0.60000$ $TU = 0.57143$ $GK = 0.55877$ $HO = 0.57227$
$N_3 = 3.00000$ $N_7 = 1.00000$ $EJ = 1.16619$ $BU = 2.00000$ $AQ = 0.38815$ $R - \frac{HO - AF}{PV} = 0.00000$
$N_4 = 4.00000$ $R = 0.70144$ $AF = 0.30000$ $SU = 0.66667$ $PV = 0.38815$

4RST6AB1R2



$N_1 = 4.20104$ $N_5 = 2.50862$
$N_2 = 1.01441$ $N_6 = 1.73376$
$N_3 = 2.28798$ $R = 0.73882$
$N_4 = 1.45264$

Unit. $AB := 1$ **Given.** $N_1 := 4.20104$ $N_2 := 1.01441$ $N_3 := 2.28798$
$N_4 := 1.45264$ $N_5 := 2.50862$ $N_6 := 1.73376$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

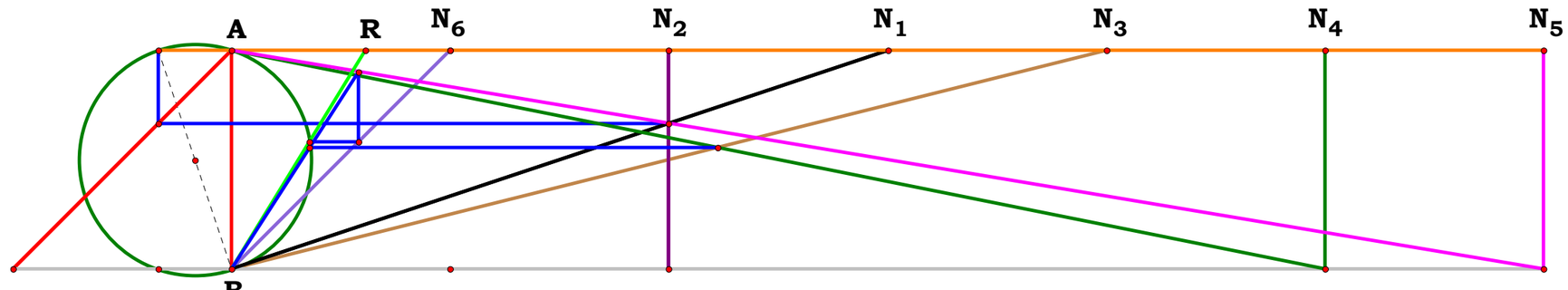
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.738818$$



$N_1 = 3.00000$ $N_4 = 5.00000$ $AB = 1.00000$ $EF = 0.02705$ $AQ = 0.64340$ $GO = 0.52077$
$N_2 = 2.00000$ $N_5 = 6.00000$ $AC = 0.33333$ $UV = 0.55556$ $BT = 0.58109$ $R\text{-}\frac{GO\text{-}AF}{PT} = 0.00000$
$N_3 = 4.00000$ $N_6 = 1.00000$ $EJ = 1.05409$ $HJ = 0.58260$ $PT = 0.58109$
$R = 0.60938$ $AF = 0.16667$ $HK = 0.52411$ $GJ = 0.60813$

Definitions.

$$A := \left(2 \cdot N_5 - N_6 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot (N_3 + N_4) \cdot AC - 2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \left(\sqrt{AC^2 + 1} - 1\right)$$

$$B := \left(N_6 - 2 \cdot N_5 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot (N_3 + N_4) \cdot AC - 2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \left(\sqrt{AC^2 + 1} + 1\right)$$

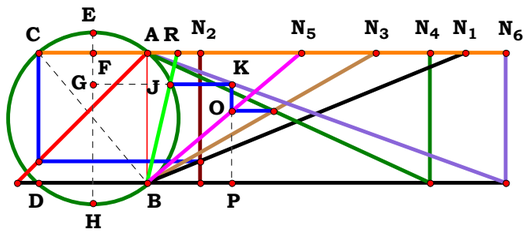
$$C := \left(2 \cdot N_5 - N_6 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot (N_3 + N_4)$$

$$D := \left(N_6 - 2 \cdot N_5 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot (N_3 + N_4) \qquad P := \sqrt{(N_3 + N_4)^2 \cdot AC^2 + 4 \cdot N_3 \cdot N_4}$$

$$X := \sqrt{\left[A \cdot \sqrt{(N_3 + N_4)^2} - C \cdot P\right] \cdot \left[B \cdot \sqrt{(N_3 + N_4)^2} - D \cdot P\right]} \qquad Y := \sqrt{16 \cdot N_6^2 \cdot \left[P \cdot (N_3 + N_4) + \left[2 \cdot N_4 \cdot N_5 - AC \cdot (N_3 + N_4)\right] \cdot \sqrt{(N_3 + N_4)^2}\right]^2}$$

$$R - \frac{N_6 \cdot (AC \cdot Y - 4 \cdot X) \cdot \left[\left[AC \cdot \sqrt{(N_3 + N_4)^2} - P\right] \cdot (N_3 + N_4) - 2 \cdot N_4 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2}\right]}{2 \cdot N_5 \cdot Y \cdot \left[P - AC \cdot \sqrt{(N_3 + N_4)^2}\right] \cdot (N_3 + N_4)} = 0$$

4RST6AB1R3



$N_1 = 2.43822$
$N_2 = 0.40421$
$N_3 = 1.75526$
$N_4 = 2.16939$
$N_5 = 1.18167$
$N_6 = 2.75076$
$R = 0.23441$

Unit. $AB := 1$ **Given.** $N_1 := 2.43822$ $N_2 := .40421$ $N_3 := 1.75526$

$N_4 := 2.16939$ $N_5 := 1.18167$ $N_6 := 2.75076$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

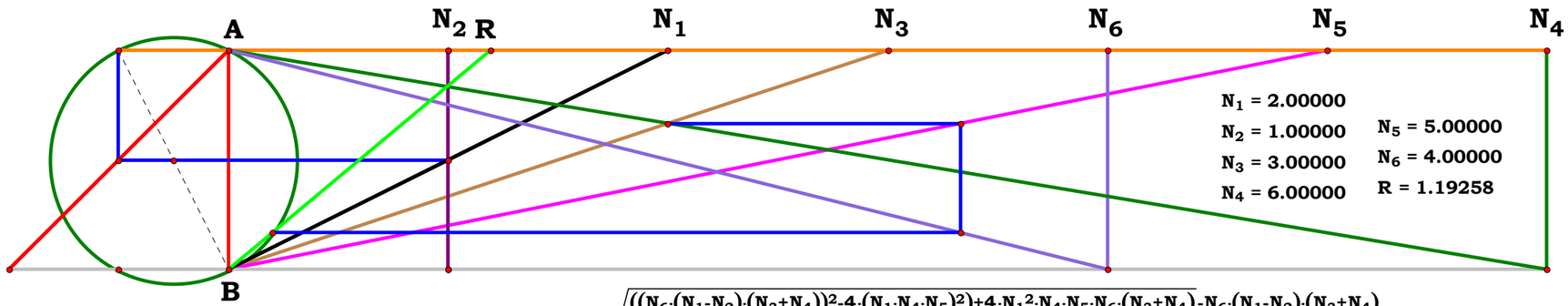
$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$KP := AB - \frac{BP}{N_6}$ $GH := KP + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $R := \frac{GJ - AF}{KP}$

$R = 0.234414$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 6.00000$
$N_5 = 5.00000$
$N_6 = 4.00000$
$R = 1.19258$

$$\frac{\sqrt{((N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4))^2 - 4 \cdot (N_1 \cdot N_4 \cdot N_5)^2) + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)} - N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_6^2 \cdot (N_3 + N_4)^2 \cdot (N_1 - N_2)^2 - 4 \cdot N_1^2 \cdot N_4^2 \cdot N_5^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot (N_3 + N_4)} - N_6 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

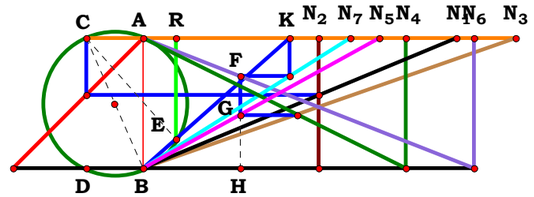
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{E^2 \cdot (C + D)^2 \cdot (A - B)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C + D)} + E \cdot (C + D) \cdot (A - B)}{2 \cdot B \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Z^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2 \cdot (U \cdot l - V \cdot k)^2 + 4 \cdot Z \cdot U^2 \cdot X \cdot Y \cdot l^2 \cdot m \cdot o \cdot p \cdot (W \cdot n + X \cdot m) - 4 \cdot U^2 \cdot X^2 \cdot Y^2 \cdot l^2 \cdot m^2 \cdot p^2} - Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot (U \cdot l - V \cdot k)}{2 \cdot U \cdot l \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

4RST6AB1R4



$N_1 = 2.39948$
$N_2 = 1.34373$
$N_3 = 2.85944$
$N_4 = 2.01441$
$N_5 = 1.81124$
$N_6 = 2.53768$
$N_7 = 1.58847$
$R = 0.25202$

Unit. $AB := 1$ **Given.** $N_1 := 2.39938$ $N_2 := 1.34373$ $N_3 := 2.85944$ $N_4 := 2.01441$

$N_5 := 1.81124$ $N_6 := 2.53768$ $N_7 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

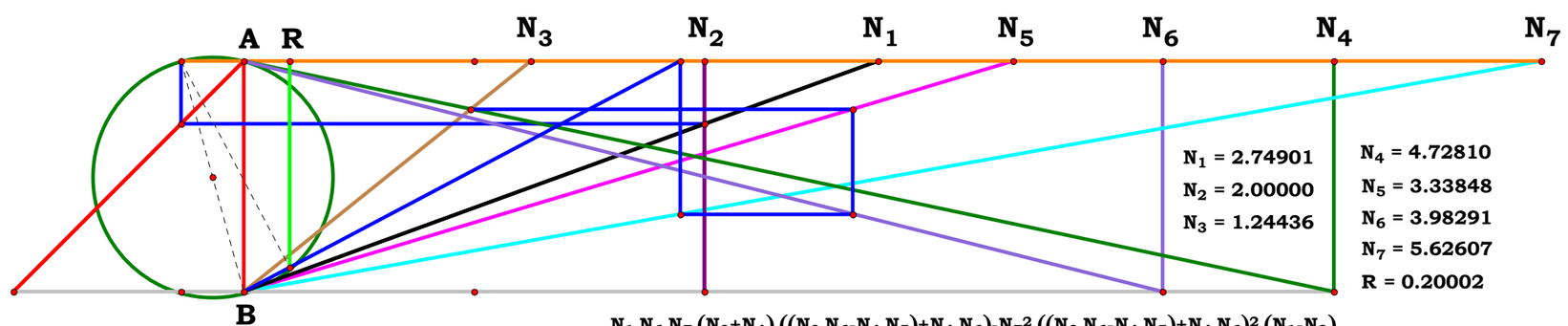
$AC := \frac{N_1 - N_2}{N_1}$ $GH := \frac{N_4}{N_3 + N_4}$

$BH := N_5 \cdot GH$ $FH := \frac{N_6 - BH}{N_6}$

$AK := N_7 \cdot FH$ $BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$ $EK := \frac{AK \cdot CK}{BK}$

$R := AK \cdot \frac{(BK - EK)}{BK}$ $R = 0.252028$



$N_1 = 2.74901$
$N_2 = 2.00000$
$N_3 = 1.24436$
$N_4 = 4.72810$
$N_5 = 3.33848$
$N_6 = 3.98291$
$N_7 = 5.62607$
$R = 0.20002$

$$\frac{N_1 \cdot N_6 \cdot N_7 \cdot (N_3+N_4) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) - N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2 \cdot (N_1 - N_2)}{N_1 \cdot N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2 + N_1 \cdot N_6^2 \cdot (N_3 + N_4)^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_7 \cdot \left[N_6 \cdot (N_3 + N_4)\right] \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) - \left(AC \cdot N_7^2\right) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2}{(N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2 \cdot N_7^2 + N_6^2 \cdot (N_3 + N_4)^2} = 0$$

$$R - \frac{N_1 \cdot N_6 \cdot N_7 \cdot (N_3 + N_4) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) - N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2 \cdot (N_1 - N_2)}{N_1 \cdot N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2 + N_1 \cdot N_6^2 \cdot (N_3 + N_4)^2} = 0$$

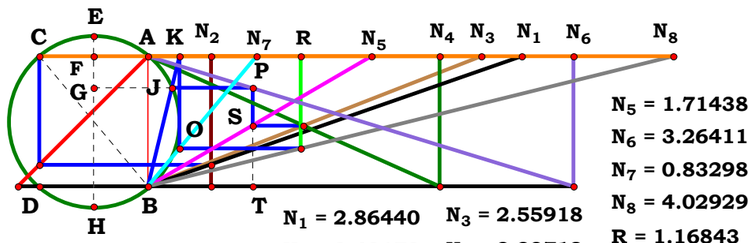
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[E \cdot (C + D) \cdot \left[B \cdot G + N_u \cdot (A - B)\right] - C \cdot F \cdot N_u \cdot (A - B)\right]}{B \cdot \left[E^2 \cdot \left(G^2 + N_u^2\right) \cdot (C + D)^2 - 2 \cdot E \cdot C \cdot F \cdot N_u^2 \cdot (C + D) + C^2 \cdot F^2 \cdot N_u^2\right]} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot T \cdot Y \cdot k \cdot n \cdot p \cdot (V \cdot m + W \cdot l) \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) - Z^2 \cdot (T \cdot k - U \cdot j) \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)^2}{Z^2 \cdot T \cdot k \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)^2 + T \cdot Y^2 \cdot k \cdot n^2 \cdot p^2 \cdot (V \cdot m + W \cdot l)^2} = 0$$

4RST6AB1R5



Unit. $AB := 1$ Given. $N_1 := 2.86440$ $N_2 := .48170$ $N_3 := 2.55918$ $N_4 := 2.23719$

$N_5 := 1.71438$ $N_6 := 3.26411$ $N_7 := .83298$ $N_8 := 4.02929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

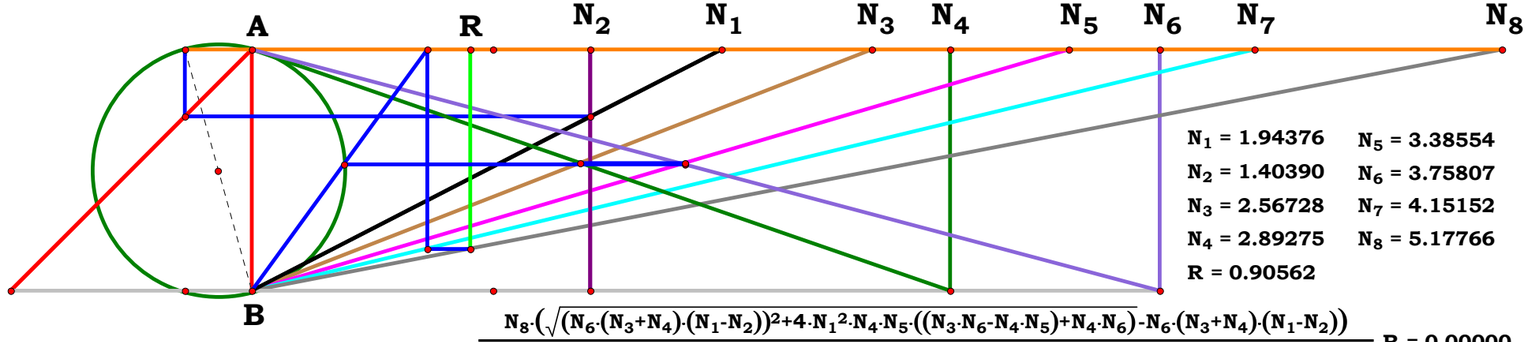
$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$ $GH := PT + EF$ $GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{(GJ - AF)}{PT}$ $KO := \frac{N_7 - AK}{N_7}$ $R := N_8 \cdot (AB - KO)$

$R = 1.168423$



$$\frac{N_8\cdot\left(\sqrt{(N_6\cdot(N_3+N_4)\cdot(N_1-N_2))^2+4\cdot N_1{}^2\cdot N_4\cdot N_5\cdot((N_3\cdot N_6-N_4\cdot N_5)+N_4\cdot N_6)}-N_6\cdot(N_3+N_4)\cdot(N_1-N_2)\right)}{2\cdot N_1\cdot N_7\cdot((N_3\cdot N_6-N_4\cdot N_5)+N_4\cdot N_6)}-R = 0.00000$$

Definitions.

$$R - \frac{N_6\cdot N_8\cdot(N_3+N_4)\cdot\left[\sqrt{N_6{}^2\cdot(N_3+N_4)^2\cdot AC^2+4\cdot N_4\cdot N_5\cdot(N_3\cdot N_6-N_4\cdot N_5+N_4\cdot N_6)}-AC\cdot\sqrt{N_6{}^2\cdot(N_3+N_4)^2}\right]}{2\cdot N_7\cdot(N_3\cdot N_6-N_4\cdot N_5+N_4\cdot N_6)\cdot\sqrt{N_6{}^2\cdot(N_3+N_4)^2}} = 0$$

$$R - \frac{N_8\cdot\left[\sqrt{N_6{}^2\cdot(N_3+N_4)^2\cdot(N_1-N_2)^2+4\cdot N_1{}^2\cdot N_4\cdot N_5\cdot(N_3\cdot N_6-N_4\cdot N_5+N_4\cdot N_6)}-N_6\cdot(N_3+N_4)\cdot(N_1-N_2)\right]}{2\cdot N_1\cdot N_7\cdot(N_3\cdot N_6-N_4\cdot N_5+N_4\cdot N_6)} = 0$$

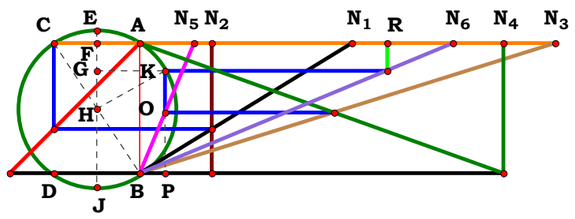
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]}{2\cdot B\cdot H\cdot[C\cdot(E-F)+D\cdot E]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{Z\cdot o\cdot\left[\sqrt{4\cdot W\cdot S^2\cdot V\cdot X\cdot j^2\cdot k\cdot m\cdot n\cdot(U\cdot l+V\cdot k)-4\cdot S^2\cdot V^2\cdot j^2\cdot k^2\cdot n^2\cdot W^2+X^2\cdot m^2\cdot(U\cdot l+V\cdot k)^2\cdot(S\cdot j-T\cdot h)^2}+X\cdot m\cdot(U\cdot l+V\cdot k)\cdot(T\cdot h-S\cdot j)\right]}{2\cdot S\cdot Y\cdot j\cdot p\cdot(U\cdot X\cdot l\cdot m-V\cdot W\cdot k\cdot n+V\cdot X\cdot k\cdot m)} = 0$$

4RST6AB1R6



$N_1 = 1.62462$
$N_2 = 0.54950$
$N_3 = 3.18876$
$N_4 = 2.78928$
$N_5 = 0.41649$
$N_6 = 2.40207$
$R = 1.89571$

Unit. $AB := 1$ Given. $N_1 := 1.62462$ $N_2 := .54950$ $N_3 := 3.18875$

$N_4 := 2.78928$ $N_5 := .41649$ $N_6 := 2.40207$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

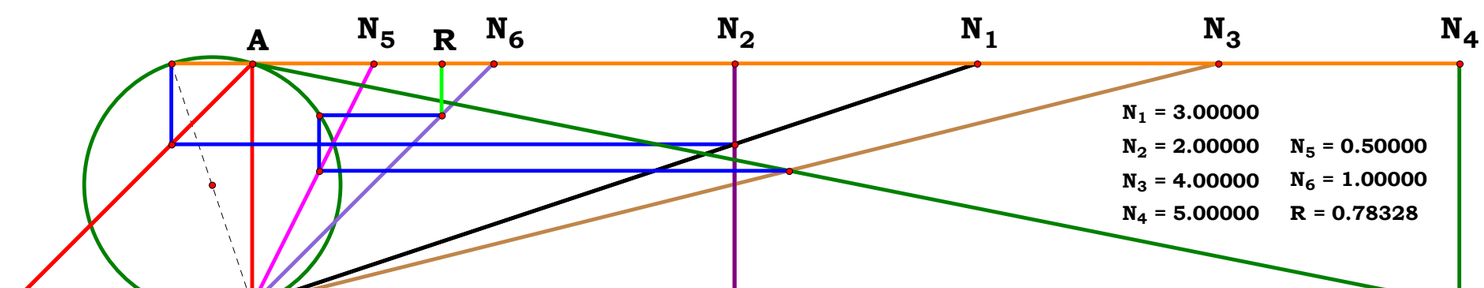
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$ $GH := \sqrt{HK^2 - GK^2}$

$KP := GH + HK - EF$ $R := N_6 \cdot KP$ $R = 1.895708$



$N_1 = 3.00000$
$N_2 = 2.00000$ $N_5 = 0.50000$
$N_3 = 4.00000$ $N_6 = 1.00000$
$N_4 = 5.00000$ $R = 0.78328$

Definitions.

B

$$R - \frac{N_6 \cdot \left[\sqrt{(N_3+N_4)^2 - 4 \cdot N_4 \cdot N_5 \cdot \left[AC \cdot (N_3+N_4) + N_4 \cdot N_5\right]} + \sqrt{(N_3+N_4)^2}\right]}{2 \cdot \sqrt{(N_3+N_4)^2}} = 0$$

$$\frac{N_6 \cdot \left(\sqrt{N_1} \cdot (N_3+N_4) + \sqrt{(N_3+N_4) \cdot (N_1 \cdot (N_3+N_4) + 4 \cdot N_2 \cdot N_4 \cdot N_5) - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot ((N_3+N_4) + N_4 \cdot N_5)}\right)}{2 \cdot \sqrt{N_1} \cdot (N_3+N_4)} - R = 0.00000$$

$$R - \frac{N_6 \cdot \left[\sqrt{N_1} \cdot (N_3+N_4) + \sqrt{\left[N_1 \cdot (N_3+N_4) + 4 \cdot N_2 \cdot N_4 \cdot N_5\right] \cdot (N_3+N_4) - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_3+N_4+N_4 \cdot N_5)}\right]}{2 \cdot \sqrt{N_1} \cdot (N_3+N_4)} = 0$$

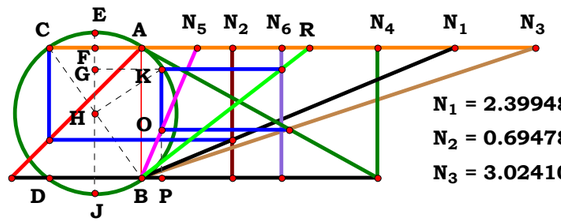
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{N_u} \cdot \left[\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^2 + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C+D)\right]}{2 \cdot F \cdot (C+D) \cdot \sqrt{B} \cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{k} \cdot \sqrt{U \cdot l \cdot o^2 \cdot (W \cdot n + X \cdot m)^2 - 4 \cdot X \cdot Y \cdot m \cdot o \cdot (U \cdot l - V \cdot k) \cdot (W \cdot n + X \cdot m) - 4 \cdot U \cdot X^2 \cdot l \cdot m^2 \cdot Y^2} + \sqrt{k \cdot l} \cdot \sqrt{U} \cdot o \cdot (W \cdot n + X \cdot m)\right]}{2 \cdot \sqrt{U} \cdot p \cdot (W \cdot n + X \cdot m) \cdot \sqrt{k \cdot l} \cdot o} = 0$$

4RST6AB1R7



$N_4 = 1.81101$ $N_5 = 0.42617$
$N_1 = 2.39948$ $N_6 = 1.07512$
$N_2 = 0.69478$ $R = 1.29014$
$N_3 = 3.02410$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .69478$ $N_3 := 3.02410$

$N_4 := 1.81101$ $N_5 := .42617$ $N_6 := 1.07512$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

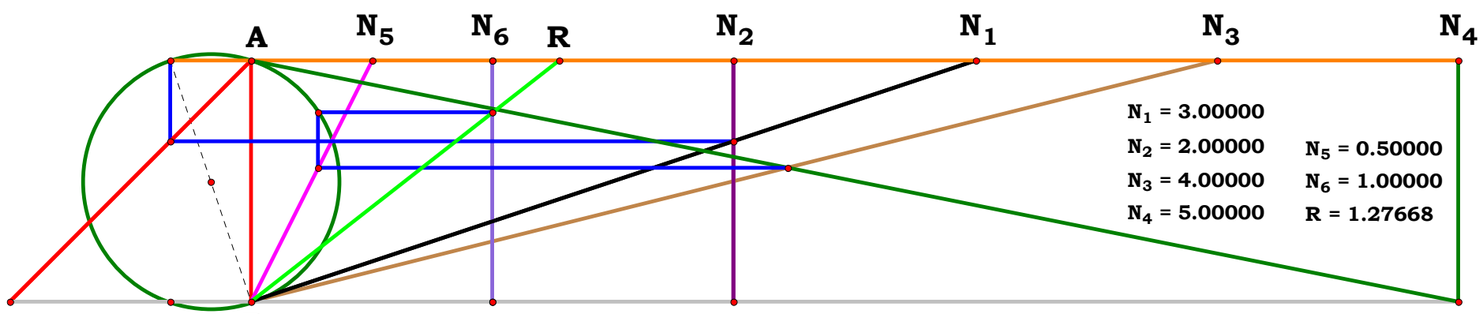
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$ $GH := \sqrt{HK^2 - GK^2}$

$KP := GH + HK - EF$ $R := \frac{N_6}{KP}$ $R = 1.290132$



$N_1 = 3.00000$ $N_5 = 0.50000$
$N_2 = 2.00000$ $N_6 = 1.00000$
$N_3 = 4.00000$ $R = 1.27668$
$N_4 = 5.00000$

Definitions.

$$R - \frac{2 \cdot N_6 \cdot \sqrt{(N_3 + N_4)^2}}{\sqrt{(N_3 + N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot AC} + \sqrt{(N_3 + N_4)^2}} = 0$$

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_6 \cdot (N_3 + N_4)}{\sqrt{N_1} \cdot (N_3 + N_4) + \sqrt{N_1 \cdot (N_3 + N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^3 \cdot (C + D) \cdot \sqrt{B} \cdot E}{F \cdot \left[\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C + D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^2 + 4 \cdot C \cdot E \cdot N_u \cdot (C + D) \cdot (A - B)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C + D)\right]} = 0$$

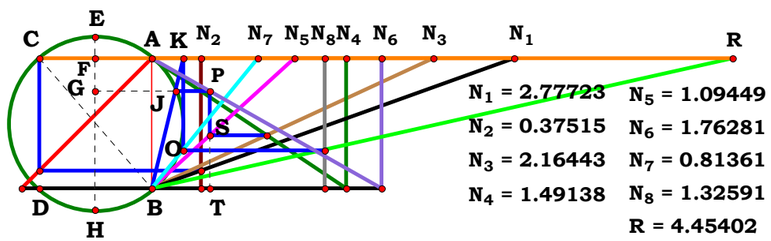
$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{U} \cdot Z \cdot (W \cdot n + X \cdot m) \cdot \sqrt{k \cdot l} \cdot o}{p \cdot \left[\sqrt{k} \cdot \sqrt{U \cdot l \cdot o^2 \cdot (W \cdot n + X \cdot m)^2 - 4 \cdot Y \cdot X \cdot m \cdot o \cdot (W \cdot n + X \cdot m) \cdot (U \cdot l - V \cdot k) - 4 \cdot U \cdot X^2 \cdot l \cdot m^2 \cdot Y^2} + \sqrt{k \cdot l} \cdot \sqrt{U} \cdot o \cdot (W \cdot n + X \cdot m)\right]} = 0$$

B

$$\frac{2 \cdot N_6 \cdot \sqrt{N_1} \cdot (N_3 + N_4)}{\sqrt{N_1} \cdot (N_3 + N_4) + \sqrt{N_1 \cdot (N_3 + N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}} - R = 0.00000$$

4RST6AB1R8



$N_1 = 2.77723$ $N_5 = 1.09449$
$N_2 = 0.37515$ $N_6 = 1.76281$
$N_3 = 2.16443$ $N_7 = 0.81361$
$N_4 = 1.49138$ $N_8 = 1.32591$
$R = 4.45402$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$ $GH := PT + EF$ $GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$ $KO := \frac{N_7 - AK}{N_7}$ $R := \frac{N_{.8}}{AB - KO}$

$R = 4.454068$

Definitions.

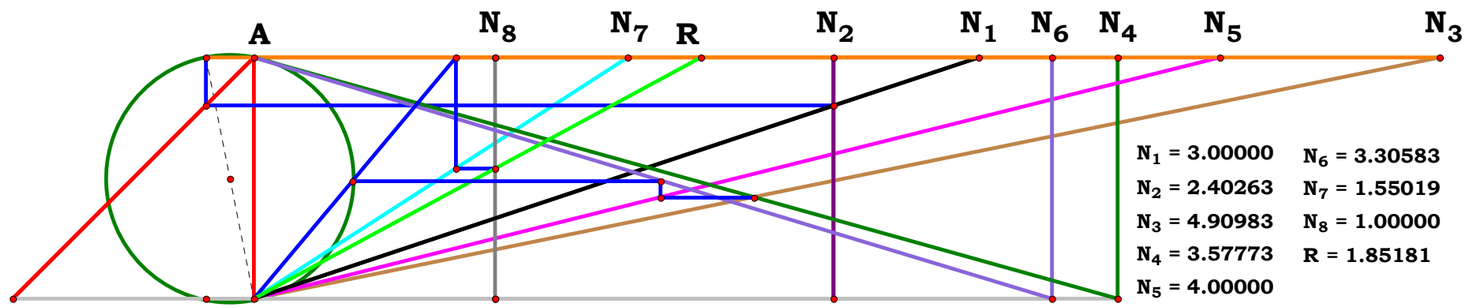
Unit. $AB := 1$ Given. $N_1 := 2.77723$ $N_2 := .37515$ $N_3 := 2.16443$ $N_4 := 1.49138$

$N_5 := 1.09449$ $N_6 := 1.76281$ $N_7 := .81361$ $N_8 := 1.32591$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$



$N_1 = 3.00000$ $N_6 = 3.30583$
$N_2 = 2.40263$ $N_7 = 1.55019$
$N_3 = 4.90983$ $N_8 = 1.00000$
$N_4 = 3.57773$ $R = 1.85181$
$N_5 = 4.00000$

$$R - \frac{2 \cdot N_7 \cdot N_8 \cdot \left(N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6\right) \cdot \sqrt{\left[N_6 \cdot \left(N_3 + N_4\right)\right]^2}}{N_6 \cdot \left(N_3 + N_4\right) \cdot \left[\sqrt{AC^2 \cdot \left[N_6^2 \cdot \left(N_3 + N_4\right)^2\right] + 4 \cdot N_4 \cdot N_5 \cdot \left(N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6\right)} - AC \cdot \sqrt{\left[N_6 \cdot \left(N_3 + N_4\right)\right]^2}\right]} = 0$$

$$R - \frac{2 \cdot N_1 \cdot N_7 \cdot N_8 \cdot \left(N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6\right)}{\sqrt{N_6^2 \cdot \left(N_1 - N_2\right)^2 \cdot \left(N_3 + N_4\right)^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot \left(N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6\right)} - N_6 \cdot \left(N_3 + N_4\right) \cdot \left(N_1 - N_2\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0 \quad N_8 - \frac{N_u}{H} = 0$$

$$R - \frac{2 \cdot B \cdot N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)}{G \cdot H \cdot \left[\sqrt{E^2 \cdot (C + D)^2 \cdot (A - B)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C + D)} + E \cdot (C + D) \cdot (A - B)\right]} = 0$$

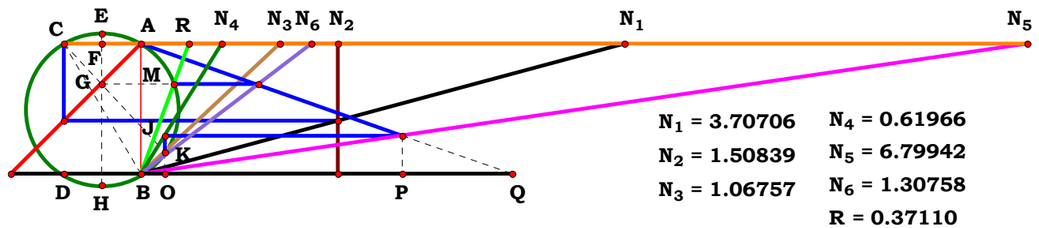
$$N_1 - \frac{S}{h} = 0 \quad N_2 - \frac{T}{j} = 0 \quad N_3 - \frac{U}{k} = 0 \quad N_4 - \frac{V}{l} = 0 \quad N_5 - \frac{W}{m} = 0 \quad N_6 - \frac{X}{n} = 0 \quad N_7 - \frac{Y}{o} = 0 \quad N_8 - \frac{Z}{p} = 0$$

$$R - \frac{2 \cdot N_u \cdot S \cdot Z \cdot j \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{G \cdot p \cdot \left[\sqrt{X^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2 \cdot (S \cdot j - T \cdot h)^2 + 4 \cdot X \cdot S^2 \cdot V \cdot W \cdot j^2 \cdot k \cdot m \cdot n \cdot (U \cdot l + V \cdot k)} - 4 \cdot S^2 \cdot V^2 \cdot W^2 \cdot j^2 \cdot k^2 \cdot n^2 + X \cdot m \cdot (U \cdot l + V \cdot k) \cdot (T \cdot h - S \cdot j)\right]} = 0$$

B

$$\frac{2 \cdot N_1 \cdot N_7 \cdot N_8 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{\sqrt{(N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4))^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4)} - R = 0.00000$$

4RST6AB1R9



$N_1 = 3.70706$ $N_4 = 0.61966$
$N_2 = 1.50839$ $N_5 = 6.79942$
$N_3 = 1.06757$ $N_6 = 1.30758$
$R = 0.37110$

Unit. Given. $N_1 := 3.70706$ $N_2 := 1.50839$ $N_3 := 1.06757$

$AB := 1$ $N_4 := .61966$ $N_5 := 6.79942$ $N_6 := 1.30758$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

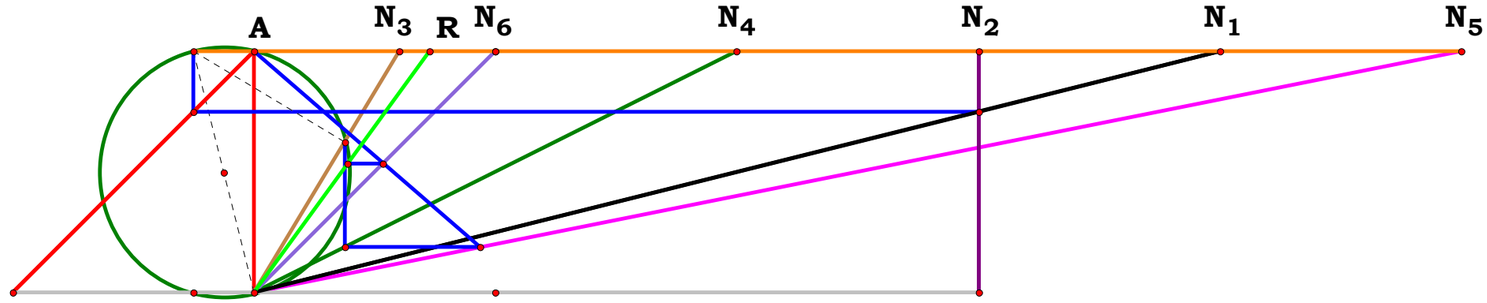
$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$KN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$

$JO := \frac{BO}{N_4}$ $BP := N_5 \cdot JO$



$BQ := \frac{BP \cdot AB}{AB - JO}$ $FG := \frac{N_6}{BQ + N_6}$

$EG := FG + EF$ $GM := \sqrt{EG \cdot (EH - EG)}$

$R := \frac{GM - AF}{AB - FG}$ $R = 0.371102$

B

$N_1 = 4.00000$ $N_4 = 2.00000$ $AB = 1.00000$ $EF = 0.01539$ $BO = 0.37500$ $FG = 0.46429$
$N_2 = 3.00000$ $N_5 = 5.00000$ $AC = 0.25000$ $BN_3 = 1.16619$ $JO = 0.18750$ $EG = 0.47967$
$N_3 = 0.60000$ $N_6 = 1.00000$ $EH = 1.03078$ $CN_3 = 0.85000$ $BP = 0.93750$ $GM = 0.51415$
$R = 0.72641$ $AF = 0.12500$ $KN_3 = 0.43732$ $BQ = 1.15385$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{N_1^2 \cdot (N_1 - N_2) \cdot \left[N_6 \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right] - N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)\right] \ldots + -N_1^2 \cdot \sqrt{N_6^2 \cdot (N_1 - N_2)^2 \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right]^2 + N_3^2 \cdot N_5^2 \cdot (N_1 - N_2)^2 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)^2 \ldots + -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot (3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right]}}{2 \cdot N_1 \cdot N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) \cdot N_1^2} = 0$$

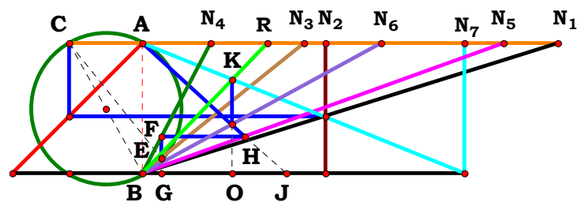
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{N_u^4 \cdot \sqrt{\begin{matrix} D^2 \cdot F^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2 \cdot (A - B)^2 + (A - B)^2 \cdot \left[N_u \cdot D \cdot (A - B) - B \cdot C \cdot (C - D) - B \cdot N_u^2\right]^2 \cdot E^2 \ \ldots \\ + \ -2 \cdot F \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right) \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot \left[N_u \cdot D \cdot (A - B) - B \cdot C \cdot (C - D) - B \cdot N_u^2\right] \cdot E \end{matrix}} + \left[\begin{matrix} N_u^6 \cdot B \cdot E \cdot (A - B) - N_u^5 \cdot D \cdot (A - B)^2 \cdot (E - F) \ \ldots \\ + \ N_u^4 \cdot B \cdot C \cdot (C \cdot E - D \cdot E + D \cdot F) \cdot (A - B) \end{matrix}\right]}{2 \cdot B \cdot D \cdot F \cdot N_u^4 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{N_1^2 \cdot \left(N_1 - N_2\right) \cdot \left[N_6 \cdot \left[N_3^2 \cdot \left(N_1 - N_2 + N_1 \cdot N_4\right) - N_1 \cdot \left(N_3 - N_4\right)\right] - N_3 \cdot N_5 \cdot \left(N_1 \cdot N_3 - N_1 - N_2 \cdot N_3\right)\right] \ \ldots}{+ \ -N_1^2 \cdot \sqrt{\begin{matrix} N_6^2 \cdot \left(N_1 - N_2\right)^2 \cdot \left[N_3^2 \cdot \left(N_1 - N_2 + N_1 \cdot N_4\right) - N_1 \cdot \left(N_3 - N_4\right)\right]^2 + N_3^2 \cdot N_5^2 \cdot \left(N_1 - N_2\right)^2 \cdot \left(N_1 \cdot N_3 - N_1 - N_2 \cdot N_3\right)^2 \ \ldots \\ + \ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2\right) \cdot \left(N_1 \cdot N_3 - N_1 - N_2 \cdot N_3\right) \cdot \left[N_3^2 \cdot \left(N_1 - N_2 + N_1 \cdot N_4\right) - N_1 \cdot \left(N_3 - N_4\right)\right] \end{matrix}}}{2 \cdot N_1 \cdot N_3 \cdot N_5 \cdot \left(N_1 \cdot N_3 - N_1 - N_2 \cdot N_3\right) \cdot N_1^2} = 0$$

4RST6AB1R10



$N_1 = 3.18403$ $N_3 = 1.24192$ $N_5 = 2.77013$ $N_7 = 2.46987$
$N_2 = 1.40185$ $N_4 = 0.52280$ $N_6 = 1.83061$ $R = 0.95450$

Unit. $AB := 1$ **Given.** $N_1 := 3.18403$ $N_2 := 1.40185$ $N_3 := 1.24192$ $N_4 := .52280$

$N_5 := 2.77013$ $N_6 := 1.83061$ $N_7 := 2.46987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

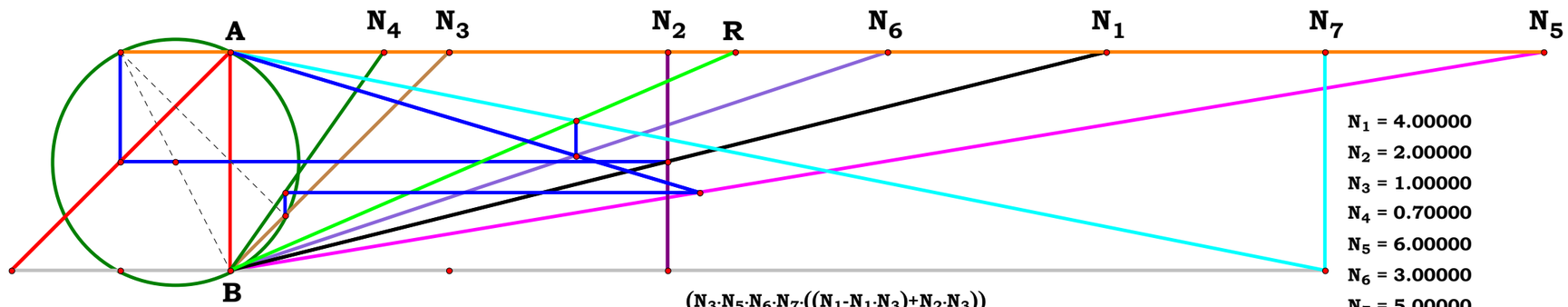
$$AC := \frac{N_1 - N_2}{N_1} \qquad BN_3 := \sqrt{AB^2 + N_3^2} \qquad CN_3 := N_3 + AC$$

$$EN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$$

$$FG := \frac{BG}{N_4} \qquad FH := N_5 \cdot FG \qquad BJ := \frac{FH}{(AB - FG)}$$

$$BO := \frac{N_6 \cdot BJ}{N_6 + BJ} \qquad KO := \frac{N_7 - BO}{N_7}$$

$$R := \frac{BO}{KO} \qquad R = 0.954505$$



$$\frac{(N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))}{(N_6 \cdot N_7 \cdot (N_3^2 \cdot ((N_1 - N_2) + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)) - N_3 \cdot N_5 \cdot (N_6 - N_7) \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))} - R = 0.00000$$

$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.70000$
$N_5 = 6.00000$
$N_6 = 3.00000$
$N_7 = 5.00000$
$R = 2.30769$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (AC \cdot N_3 - 1)}{N_3 \cdot N_5 \cdot N_6 - N_3 \cdot N_7 \cdot (N_5 - N_6) - N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) - AC \cdot N_3^2 \cdot [N_5 \cdot N_6 - N_7 \cdot (N_5 - N_6)]} = 0$$

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)}{N_6 \cdot N_7 \cdot [N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)] - N_3 \cdot N_5 \cdot (N_6 - N_7) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

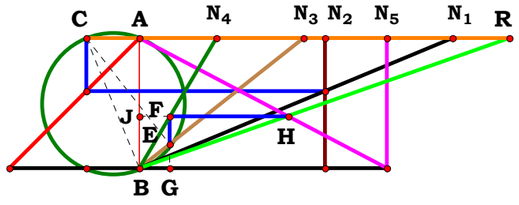
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0$$

$$R - \frac{D \cdot N_u \cdot [B \cdot C + N_u \cdot (A - B)]}{F \cdot D \cdot [B \cdot C + N_u \cdot (A - B)] + [B \cdot (C^2 + N_u^2) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)] \cdot E - G \cdot D \cdot [B \cdot C + N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{T}{j} = 0 \quad N_2 - \frac{U}{k} = 0 \quad N_3 - \frac{V}{l} = 0 \quad N_4 - \frac{W}{m} = 0 \quad N_5 - \frac{X}{n} = 0 \quad N_6 - \frac{Y}{o} = 0 \quad N_7 - \frac{Z}{p} = 0$$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (U \cdot V \cdot j - T \cdot V \cdot k + T \cdot k \cdot l)}{W \cdot T \cdot Y \cdot Z \cdot k \cdot n \cdot (V^2 + l^2) + [X \cdot V \cdot m \cdot (Y \cdot p - Z \cdot o) \cdot (T \cdot V \cdot k - U \cdot V \cdot j - T \cdot k \cdot l) + V \cdot Y \cdot Z \cdot m \cdot n \cdot (T \cdot V \cdot k - U \cdot V \cdot j - T \cdot k \cdot l)]} = 0$$

4RST6AB1R11



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.26129$
$N_4 = 0.59060$
$N_5 = 1.89841$
$R = 2.84269$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.26129$

$N_4 := .59060$ $N_5 := 1.89841$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \quad BN_3 := \sqrt{N_3^2 + AB^2} \quad CN_3 := N_3 + AC$$

$$EN_3 := \frac{N_3 \cdot CN_3}{BN_3} \quad BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3} \quad FG := \frac{BG}{N_4}$$

$$HJ := N_5 \cdot (AB - FG) \quad R := \frac{HJ}{FG} \quad R = 2.842644$$

Definitions.

$$R - \frac{N_5 \cdot \left(N_3 - N_4 - N_3^2 \cdot N_4 - AC \cdot N_3^2\right)}{N_3 \cdot (AC \cdot N_3 - 1)} = 0$$

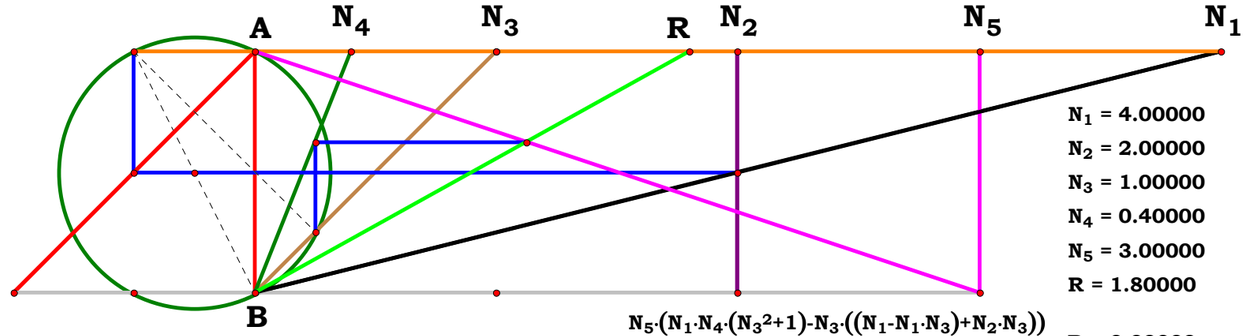
$$R - \frac{N_5 \cdot \left[N_1 \cdot N_4 \cdot \left(N_3^2 + 1\right) - N_3 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)\right]}{N_3 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{B \cdot N_u^3 - D \cdot N_u^2 \cdot (A - B) + B \cdot C \cdot N_u \cdot (C - D)}{D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

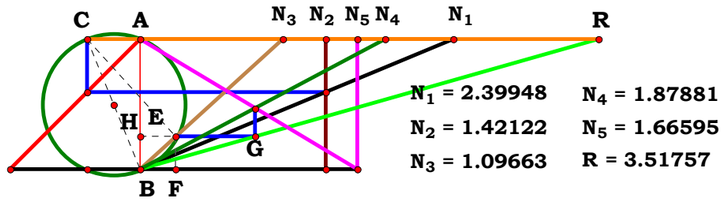
$$R - \frac{Y \cdot V \cdot Z \cdot m \cdot \left(X^2 + n^2\right) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)}{W \cdot X^2 \cdot l \cdot o \cdot p - V \cdot X^2 \cdot m \cdot o \cdot p + V \cdot X \cdot m \cdot n \cdot o \cdot p} = 0$$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 3.00000$
$R = 1.80000$

$$\frac{N_5 \cdot (N_1 \cdot N_4 \cdot (N_3^2 + 1) - N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))}{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$$

4RST6AB1R12



Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.09663$

$N_4 := 1.87881$ $N_5 := 1.66595$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

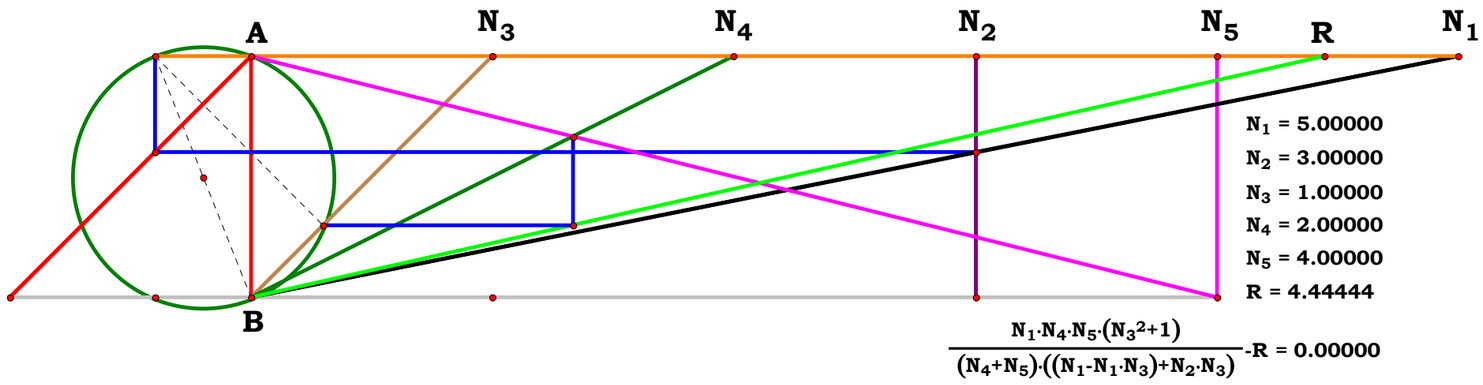
$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 3.517552$



Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot (1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot (N_1 - N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

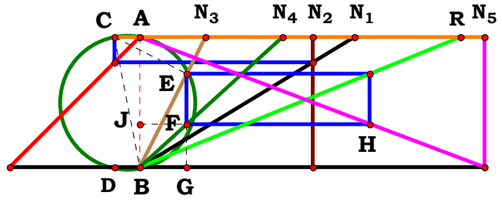
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{C \cdot (D + E) \cdot [B \cdot C + N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{n \cdot (Y \cdot p + Z \cdot o) \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$

4RST6AB1R13



$N_1 = 1.64399$
$N_2 = 1.32436$
$N_3 = 0.50580$
$N_4 = 1.09426$
$N_5 = 2.64422$
$R = 2.46063$

Unit. $AB := 1$ **Given.** $N_1 := 1.64399$ $N_2 := 1.32436$ $N_3 := .50580$

$N_4 := 1.09426$ $N_5 := 2.64422$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

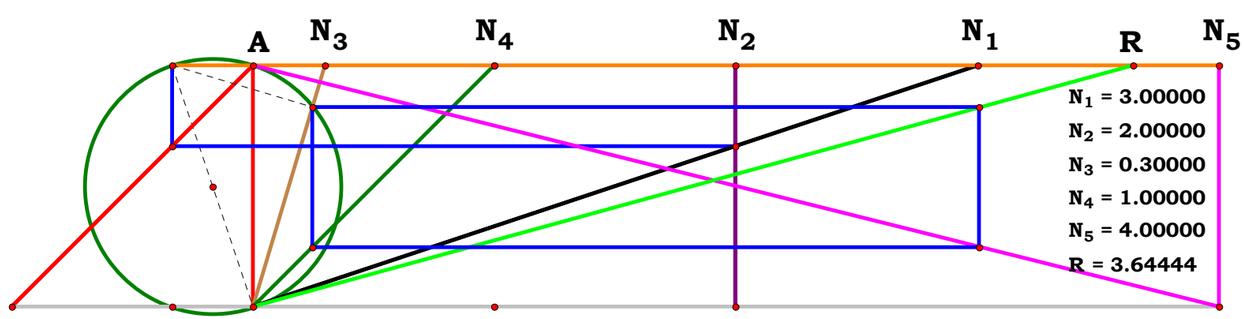
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$ $EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 2.460633$



Definitions.

$$R - \frac{N_5 \cdot \left(N_3 - N_4 - N_3^2 \cdot N_4 - AC \cdot N_3^2\right)}{N_4 \cdot (AC \cdot N_3 - 1)} = 0$$

$$R - \frac{N_5 \cdot \left[N_1 \cdot N_3 \cdot (N_3 - 1) - N_2 \cdot N_3^2 + N_1 \cdot N_4 \cdot \left(N_3^2 + 1\right)\right]}{N_4 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left[B \cdot N_u^2 - D \cdot N_u \cdot (A - B) + B \cdot C \cdot (C - D)\right]}{B \cdot C^2 \cdot E + C \cdot E \cdot N_u \cdot (A - B)} = 0$$

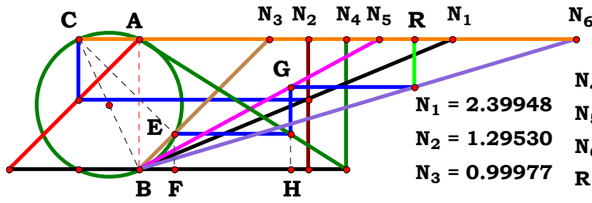
$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot V \cdot Z \cdot m \cdot \left(X^2 + n^2\right) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l - V \cdot m \cdot n)}{Y \cdot n \cdot p \cdot (W \cdot X \cdot l - V \cdot X \cdot m + V \cdot m \cdot n)} = 0$$

B

$$\frac{N_5 \cdot ((N_1 \cdot N_3 \cdot (N_3 - 1) - N_2 \cdot N_3^2) + N_1 \cdot N_4 \cdot (N_3^2 + 1))}{N_4 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)} - R = 0.00000$$

4RST6AB1R14



$N_1 = 2.39948$
$N_2 = 1.29530$
$N_3 = 0.99977$
$N_4 = 1.58824$
$N_5 = 1.84030$
$N_6 = 3.35128$
$R = 2.11128$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.29530$ $N_3 := .99977$

$N_4 := 1.58824$ $N_5 := 1.84030$ $N_6 := 3.35128$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

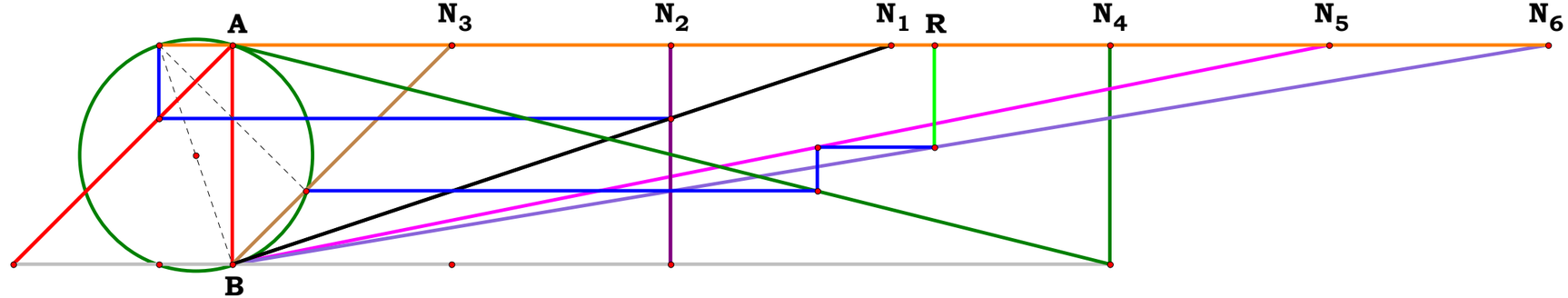
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - EF)$

$GH := \frac{BH}{N_5}$ $R := N_6 \cdot GH$ $R = 2.111274$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$N_6 = 6.00000$
$\frac{N_3 \cdot N_4 \cdot N_6 \cdot ((N_1 - N_2) + N_1 \cdot N_3)}{N_1 \cdot N_5 \cdot (N_3^2 + 1)} - R = 0.00000$
$R = 3.20000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot (AC + N_3)}{N_5 \cdot (N_3^2 + 1)} = 0$$

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_1 - N_2 + N_1 \cdot N_3)}{N_1 \cdot N_5 \cdot (N_3^2 + 1)} = 0$$

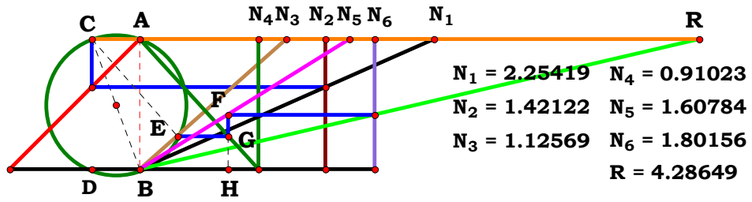
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot [B \cdot N_u - C \cdot (A - B)]}{F \cdot B \cdot D \cdot (C^2 + N_u^2)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (U \cdot W \cdot l + U \cdot l \cdot m - V \cdot k \cdot m)}{p \cdot U \cdot Y \cdot l \cdot n \cdot (W^2 + m^2)} = 0$$

4RST6AB1R15



$N_1 = 2.25419$ $N_4 = 0.91023$
$N_2 = 1.42122$ $N_5 = 1.60784$
$N_3 = 1.12569$ $N_6 = 1.80156$
$R = 4.28649$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.42122$ $N_3 := 1.12569$

$N_4 := .91023$ $N_5 := 1.60784$ $N_6 := 1.80156$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

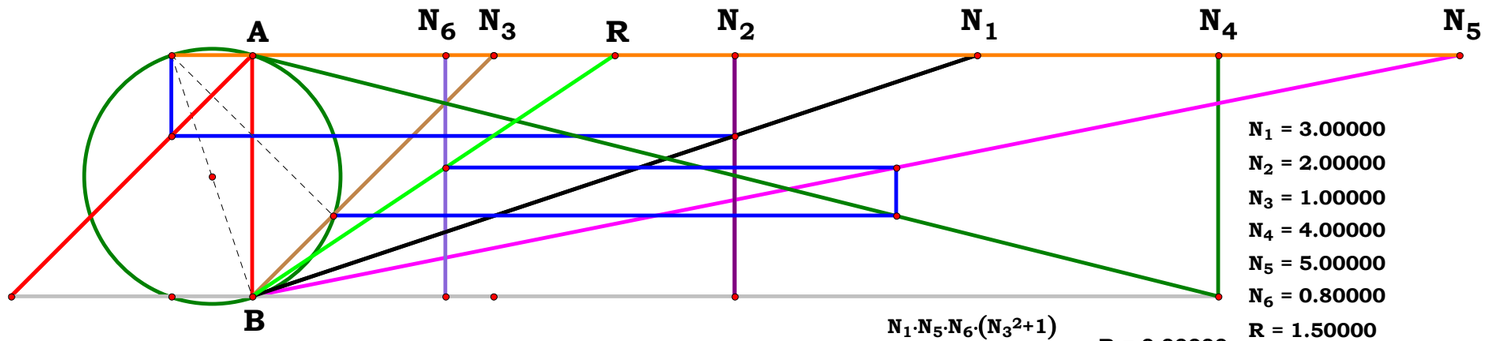
$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $GH := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - GH)$

$FH := \frac{BH}{N_5}$ $R := \frac{N_6}{FH}$ $R = 4.28652$

Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(AC + N_3\right)} = 0$$

$$R - \frac{N_1 \cdot N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(N_1 - N_2 + N_1 \cdot N_3\right)} = 0$$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$N_6 = 0.80000$
$R = 1.50000$

$\frac{N_1 \cdot N_5 \cdot N_6 \cdot (N_3^2+1)}{N_3 \cdot N_4 \cdot ((N_1-N_2)+N_1 \cdot N_3)} - R = 0.00000$

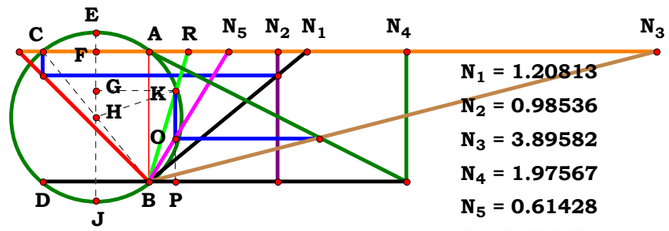
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{B \cdot D \cdot \left(C^2 + N_u^2\right)}{E \cdot F \cdot \left[B \cdot N_u - C \cdot (A - B)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{U \cdot Y \cdot Z \cdot l \cdot n \cdot \left(W^2 + m^2\right)}{o \cdot p \cdot W \cdot X \cdot (U \cdot W \cdot l + U \cdot l \cdot m - V \cdot k \cdot m)} = 0$$

4RST6AB2R0



$N_1 = 1.20813$
$N_2 = 0.98536$
$N_3 = 3.89582$
$N_4 = 1.97567$
$N_5 = 0.61428$
$R = 0.29667$

Unit. $AB := 1$ Given. $N_1 := 1.20813$ $N_2 := .98536$ $N_3 := 3.89582$

$N_4 := 1.97567$ $N_5 := .61428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

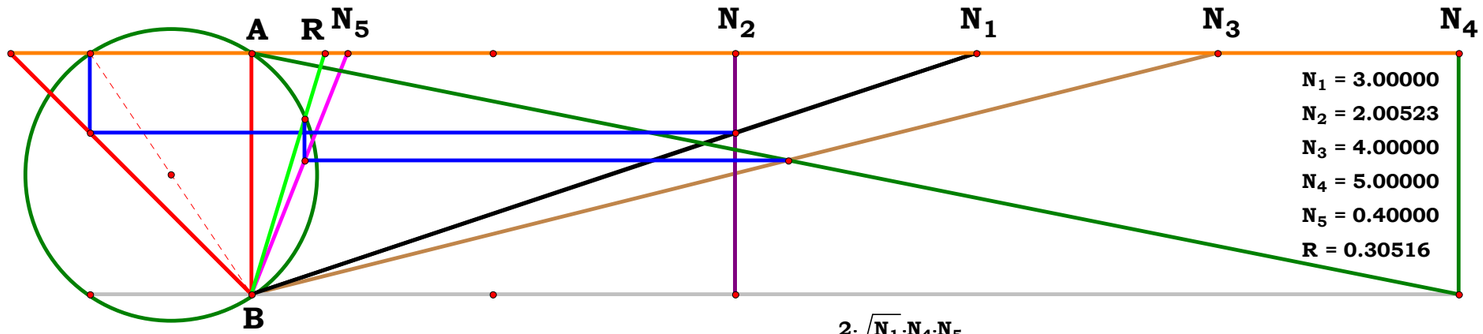
Descriptions.

$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := BP + AF$ $HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$KO := \frac{AB}{2} + GH$ $R := \frac{BP}{KO}$ $R = 0.296676$



$N_1 = 3.00000$
$N_2 = 2.00523$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 0.40000$
$R = 0.30516$

$$\frac{2\cdot\sqrt{N_1}\cdot N_4\cdot N_5}{\sqrt{N_1}\cdot(N_3+N_4)+\sqrt{(((N_1\cdot N_3{}^2+N_1\cdot N_4{}^2)-4\cdot N_1\cdot N_4{}^2\cdot N_5{}^2)+2\cdot N_1\cdot N_3\cdot N_4)-4\cdot N_2\cdot N_4\cdot N_5\cdot(N_3+N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2\cdot\sqrt{N_1}\cdot N_4\cdot N_5}{\sqrt{N_1}\cdot\left(N_3+N_4\right)+\sqrt{N_1\cdot N_3{}^2+N_1\cdot N_4{}^2-4\cdot N_1\cdot N_4{}^2\cdot N_5{}^2+2\cdot N_1\cdot N_3\cdot N_4-4\cdot N_2\cdot N_4\cdot N_5\cdot\left(N_3+N_4\right)}} = 0$$

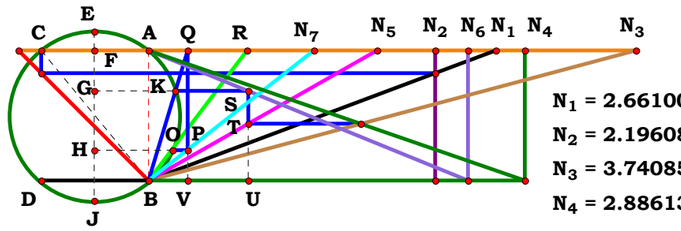
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{B}}{\sqrt{N_u\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot N_u{}^2\right]}+\sqrt{N_u}\cdot\sqrt{B}\cdot E\cdot(C+D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2\cdot\sqrt{V}\cdot Y\cdot Z\cdot n\cdot\sqrt{l\cdot m}}{\sqrt{l}\cdot\sqrt{V\cdot m\cdot(X\cdot o\cdot p-2\cdot Y\cdot Z\cdot n+Y\cdot n\cdot p)}\cdot(2\cdot Y\cdot Z\cdot n+X\cdot o\cdot p+Y\cdot n\cdot p)-[4\cdot W\cdot Y\cdot Z\cdot l\cdot n\cdot p\cdot(X\cdot o+Y\cdot n)]}+\sqrt{l\cdot m}\cdot\sqrt{V}\cdot p\cdot(X\cdot o+Y\cdot n) = 0$$

4RST6AB2R1



$N_1 = 2.66100$ $N_5 = 1.75720$
$N_2 = 2.19608$ $N_6 = 2.45050$
$N_3 = 3.74085$ $N_7 = 1.27081$
$N_4 = 2.88613$ $R = 0.75792$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 2.19608$ $N_3 := 3.74085$ $N_4 := 2.88613$ $N_5 := 1.75720$ $N_6 := 2.45050$ $N_7 := 1.27081$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

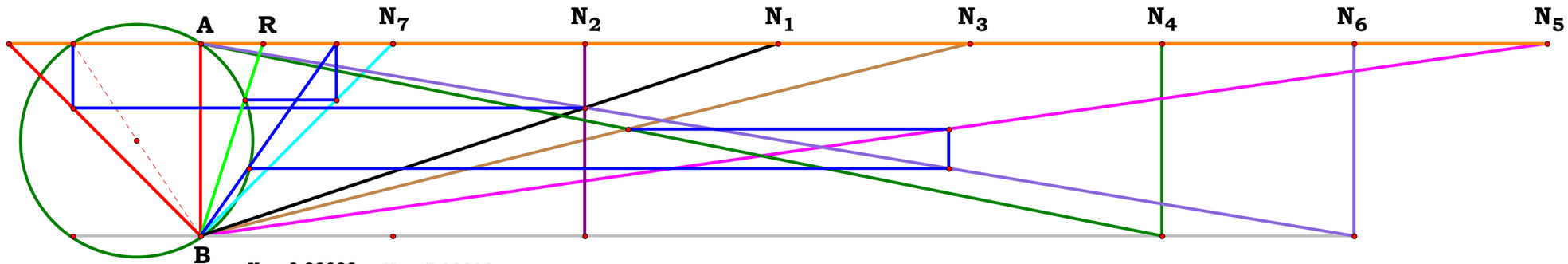
$$PV := \frac{AQ}{N_7}$$

$$HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)}$$

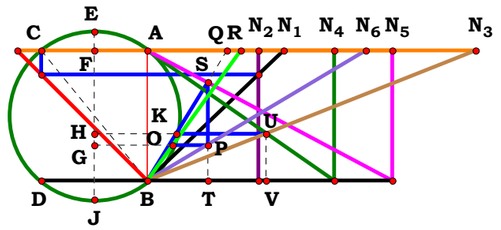
$$R := \frac{HO - AF}{PV}$$

$$R = 0.757925$$



$N_1 = 3.00000$ $N_5 = 7.00000$ $AB = 1.00000$ $EF = 0.10093$ $GJ = 0.45278$ $HJ = 0.80873$
$N_2 = 2.00000$ $N_6 = 6.00000$ $AC = 0.66667$ $TU = 0.55556$ $GK = 0.58238$ $HO = 0.56385$
$N_3 = 4.00000$ $N_7 = 1.00000$ $EJ = 1.20185$ $BU = 3.88889$ $AQ = 0.70781$ $R - \frac{HO-AF}{PV} = 0.00000$
$N_4 = 5.00000$ $R = 0.32568$ $AF = 0.33333$ $SU = 0.35185$ $PV = 0.70781$

4RST6AB2R2



$N_1 = 1.04347$ $N_5 = 1.88311$
$N_2 = 0.84976$ $N_6 = 1.67564$
$N_3 = 2.52044$ $R = 0.71485$
$N_4 = 1.43327$

Unit. $AB := 1$ **Given.** $N_1 := 1.04347$ $N_2 := .84976$ $N_3 := 2.52044$
$N_4 := 1.43327$ $N_5 := 1.88311$ $N_6 := 1.67564$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

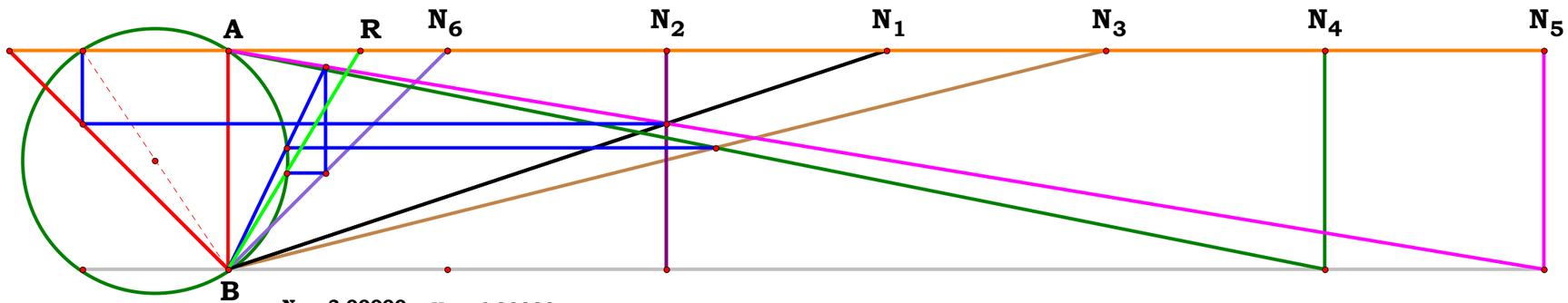
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

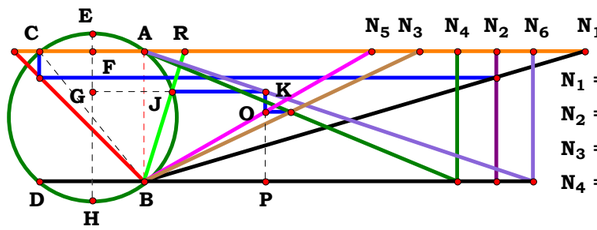
$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.714844$$



$N_1 = 3.00000$ $N_5 = 6.00000$ $AB = 1.00000$ $EF = 0.10093$ $AQ = 0.47703$ $GO = 0.59811$
$N_2 = 2.00000$ $N_6 = 1.00000$ $AC = 0.66667$ $UV = 0.55556$ $BT = 0.44190$ $R - \frac{GO-AF}{PT} = 0.00000$
$N_3 = 4.00000$ $R = 0.59918$ $EJ = 1.20185$ $HJ = 0.65648$ $PT = 0.44190$
$N_4 = 5.00000$ $AF = 0.33333$ $HK = 0.59835$ $GJ = 0.54282$

4RST6AB2R3



$N_1 = 3.37775$
$N_2 = 2.69974$
$N_3 = 2.11364$
$N_4 = 2.40185$
$N_5 = 1.74751$
$N_6 = 2.98322$
$R = 0.30808$

Unit. $AB := 1$ Given. $N_1 := 3.37775$ $N_2 := 2.69974$ $N_3 := 2.11364$

$N_4 := 2.40185$ $N_5 := 1.74751$ $N_6 := 2.98322$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

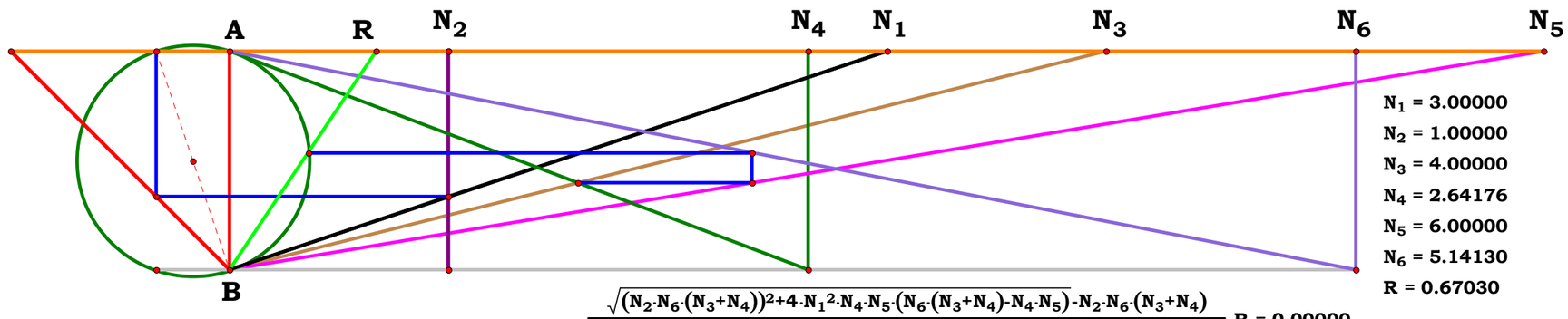
$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $KP := AB - \frac{BP}{N_6}$

$GH := KP + EF$ $GJ := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GJ - AF}{KP}$ $R = 0.308084$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 2.64176$
$N_5 = 6.00000$
$N_6 = 5.14130$
$R = 0.67030$

$$\frac{\sqrt{(N_2 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot (N_6 \cdot (N_3 + N_4) - N_4 \cdot N_5)} - N_2 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot [N_6 \cdot (N_3 + N_4) - N_4 \cdot N_5]} - N_2 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot N_1 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

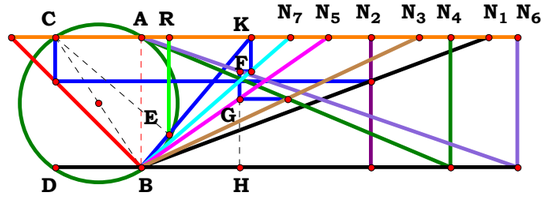
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{A^2 \cdot E^2 \cdot (C + D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C + D)} - A \cdot E \cdot (C + D)}{2 \cdot B \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot Y \cdot U^2 \cdot X \cdot Z \cdot l^2 \cdot m \cdot o \cdot p \cdot (W \cdot n + X \cdot m) + V^2 \cdot Z^2 \cdot k^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2 - 4 \cdot U^2 \cdot X^2 \cdot l^2 \cdot m^2 \cdot p^2 \cdot Y^2} - V \cdot Z \cdot k \cdot o \cdot (W \cdot n + X \cdot m)}{2 \cdot U \cdot l \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

4RST6AB2R4



$N_1 = 2.66100$ $N_3 = 2.13301$ $N_5 = 1.43757$ $N_7 = 1.14489$

$N_2 = 1.76022$ $N_4 = 2.37279$ $N_6 = 2.88636$ $R = 0.21754$

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.76022$ $N_3 := 2.13301$ $N_4 := 2.37279$

$N_5 := 1.43757$ $N_6 := 2.88636$ $N_7 := 1.14489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

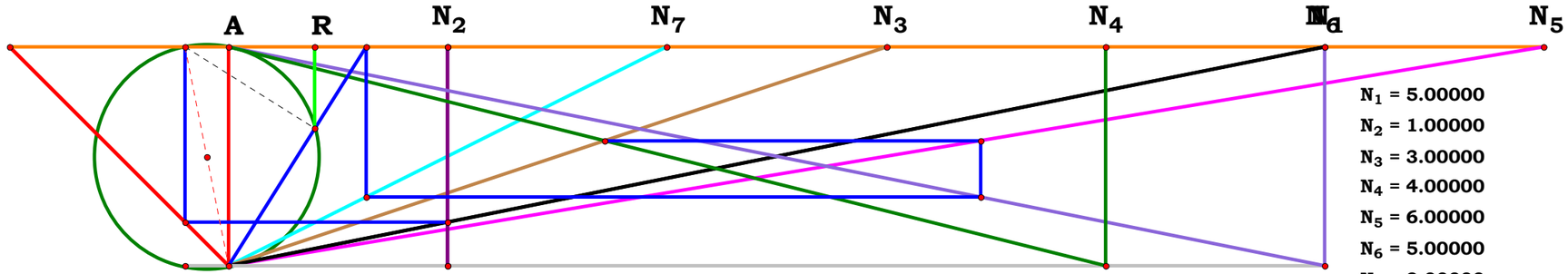
$AC := \frac{N_2}{N_1}$ $GH := \frac{N_4}{N_3 + N_4}$ $BH := N_5 \cdot GH$

$FH := \frac{N_6 - BH}{N_6}$ $AK := N_7 \cdot FH$

$BK := \sqrt{AK^2 + AB^2}$ $CK := AK + AC$

$EK := \frac{AK \cdot CK}{BK}$ $R := AK \cdot \frac{(BK - EK)}{BK}$

$R = 0.217541$



B

$$\frac{N_1 \cdot N_6 \cdot N_7 \cdot (N_3+N_4) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) - N_2 \cdot N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2}{N_1 \cdot (N_6^2 \cdot (N_3+N_4)^2 + N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_6 \cdot N_7 \cdot (N_3 + N_4) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) - N_2 \cdot N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2}{N_1 \cdot \left[N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2\right]} = 0$$

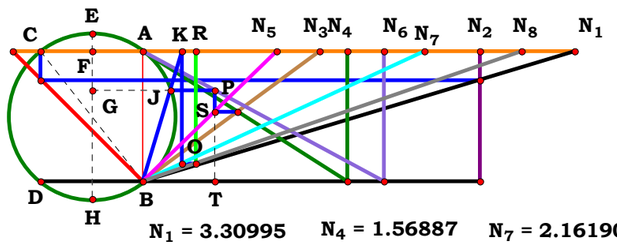
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[E \cdot (C + D) \cdot (B \cdot G - A \cdot N_u) + A \cdot C \cdot F \cdot N_u\right]}{E^2 \cdot B \cdot \left(G^2 + N_u^2\right) \cdot (C + D)^2 - 2 \cdot E \cdot B \cdot C \cdot F \cdot N_u^2 \cdot (C + D) + B \cdot C^2 \cdot F^2 \cdot N_u^2} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot [Y \cdot n \cdot (V \cdot m + W \cdot l) \cdot (T \cdot k \cdot p - U \cdot Z \cdot j) + U \cdot W \cdot X \cdot Z \cdot j \cdot l \cdot o]}{T \cdot k \cdot \left[Y^2 \cdot n^2 \cdot \left(Z^2 + p^2\right) \cdot (V \cdot m + W \cdot l)^2 - 2 \cdot Y \cdot W \cdot X \cdot Z^2 \cdot l \cdot n \cdot o \cdot (V \cdot m + W \cdot l) + W^2 \cdot X^2 \cdot Z^2 \cdot l^2 \cdot o^2\right]} = 0$$

4RST6AB2R5



$N_1 = 3.30995$ $N_4 = 1.56887$ $N_7 = 2.16190$

$N_2 = 2.58351$ $N_5 = 1.03076$ $N_8 = 2.90655$

$N_3 = 1.35815$ $N_6 = 1.84998$ $R = 0.40486$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2} \qquad AF := \frac{AC}{2}$$

$$EF := \frac{EH - AB}{2} \qquad ST := \frac{N_4}{N_3 + N_4}$$

$$BT := N_5 \cdot ST \qquad PT := \frac{N_6 - BT}{N_6}$$

$$GH := PT + EF \qquad GJ := \sqrt{GH \cdot (EH - GH)}$$

$$AK := \frac{(GJ - AF)}{PT} \qquad KO := \frac{N_7 - AK}{N_7}$$

$$R := N_8 \cdot (AB - KO) \qquad R = 0.404856$$

Definitions.

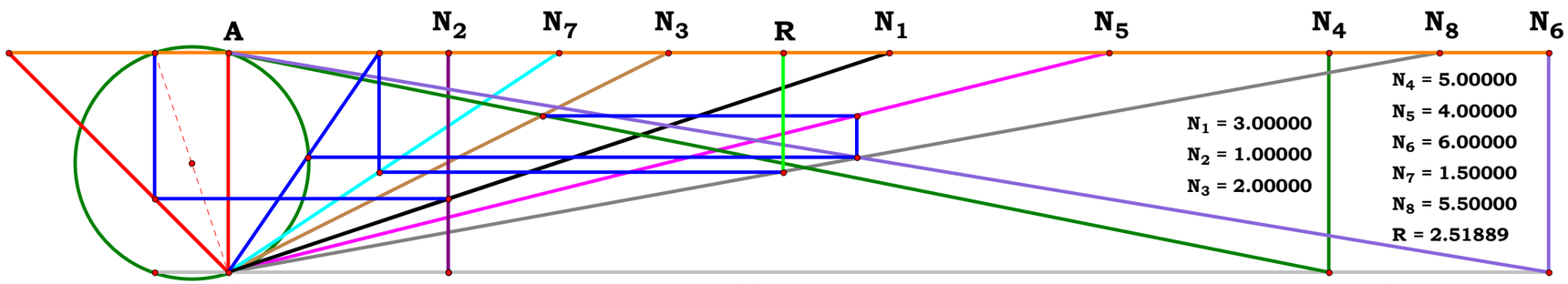
Unit. $AB := 1$ Given. $N_1 := 3.30995$ $N_2 := 2.58351$ $N_3 := 1.35815$ $N_4 := 1.56887$

$N_5 := 1.03076$ $N_6 := 1.84998$ $N_7 := 2.16190$ $N_8 := 2.90655$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$$h := \frac{S}{N_1} \quad j := \frac{T}{N_2} \quad k := \frac{Y}{N_3} \quad l := \frac{V}{N_4} \quad m := \frac{W}{N_5} \quad n := \frac{X}{N_6} \quad o := \frac{Y}{N_7} \quad p := \frac{Z}{N_8}$$



B

$$\frac{N_8 \cdot \left(\sqrt{(N_2 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - (N_2 \cdot N_6 \cdot (N_3 + N_4))\right)}{2 \cdot N_1 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

$$R - \frac{N_8 \cdot \left[\sqrt{N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot (N_3 + N_4)\right]}{2 \cdot N_1 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

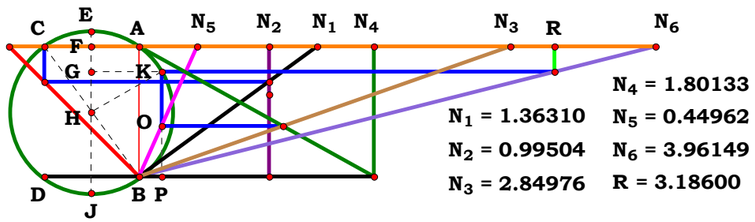
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0 \quad N_8 - \frac{N_u}{H} = 0$$

$$R - \frac{G \cdot \left[\sqrt{E^2 \cdot A^2 \cdot (C + D)^2 + 4 \cdot E \cdot B^2 \cdot C \cdot F \cdot (C + D) - 4 \cdot B^2 \cdot C^2 \cdot F^2} - A \cdot E \cdot (C + D)\right]}{2 \cdot B \cdot H \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$$N_1 - \frac{S}{h} = 0 \quad N_2 - \frac{T}{j} = 0 \quad N_3 - \frac{U}{k} = 0 \quad N_4 - \frac{V}{l} = 0 \quad N_5 - \frac{W}{m} = 0 \quad N_6 - \frac{X}{n} = 0 \quad N_7 - \frac{Y}{o} = 0 \quad N_8 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot o \cdot \left[\sqrt{4 \cdot S^2 \cdot V \cdot W \cdot j^2 \cdot k \cdot n \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m) + T^2 \cdot X^2 \cdot h^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - T \cdot X \cdot h \cdot m \cdot (U \cdot l + V \cdot k)\right]}{2 \cdot S \cdot Y \cdot j \cdot p \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} = 0$$

4RST6AB2R6



$N_4 = 1.80133$ $N_5 = 0.44962$
$N_1 = 1.36310$ $N_6 = 3.96149$
$N_2 = 0.99504$ $R = 3.18600$
$N_3 = 2.84976$

Unit. $AB := 1$ Given. $N_1 := 1.36310$ $N_2 := .99504$ $N_3 := 2.84976$

$N_4 := 1.80133$ $N_5 := .44962$ $N_6 := 3.96149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

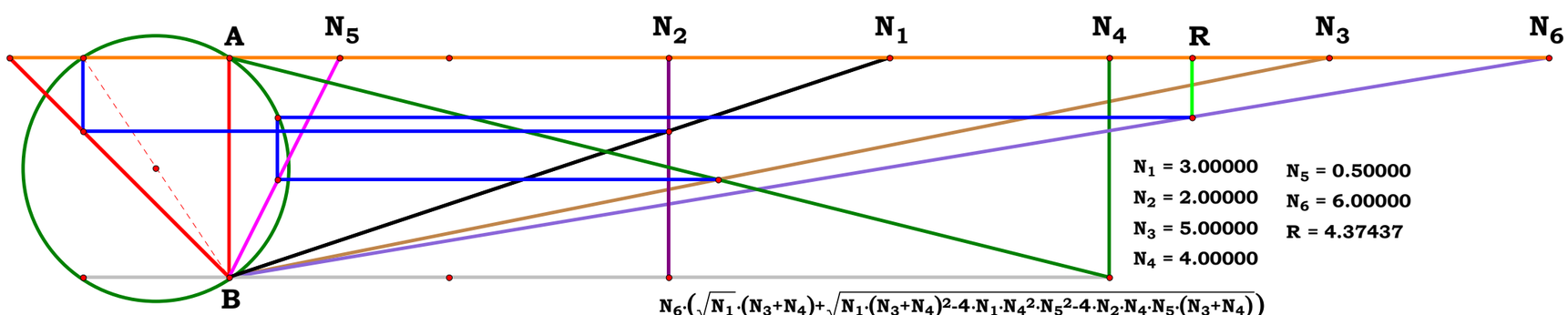
$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := AF + BP$ $GH := \sqrt{HK^2 - GK^2}$

$KP := GH + HK - EF$

$R := N_6 \cdot KP$ $R = 3.18599$



$N_1 = 3.00000$ $N_5 = 0.50000$
$N_2 = 2.00000$ $N_6 = 6.00000$
$N_3 = 5.00000$ $R = 4.37437$
$N_4 = 4.00000$

$$\frac{N_6 \cdot \left(\sqrt{N_1} \cdot (N_3+N_4) + \sqrt{N_1 \cdot (N_3+N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3+N_4)}\right)}{2 \cdot \sqrt{N_1} \cdot (N_3+N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_1} \cdot (N_3+N_4) + \sqrt{N_1 \cdot (N_3+N_4)^2 - 4 \cdot N_1 \cdot N_4^2 \cdot N_5^2 - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3+N_4)}\right]}{2 \cdot \sqrt{N_1} \cdot (N_3+N_4)} = 0$$

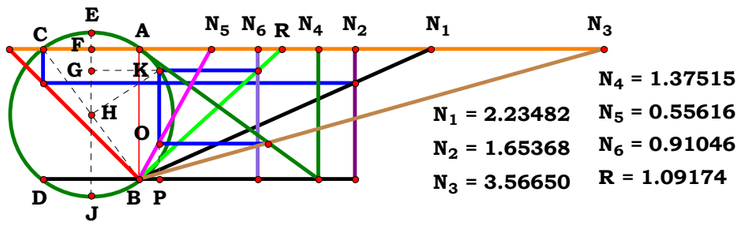
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{N_u} \cdot \left[\sqrt{-N_u \cdot \left[4 \cdot B \cdot C^2 \cdot N_u^2 - B \cdot E^2 \cdot (C+D)^2 + 4 \cdot A \cdot C \cdot E \cdot N_u \cdot (C+D)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C+D)\right]}{2 \cdot F \cdot (C+D) \cdot \sqrt{B} \cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{k} \cdot \sqrt{U \cdot l \cdot (W \cdot n \cdot o - 2 \cdot X \cdot Y \cdot m + X \cdot m \cdot o) \cdot (2 \cdot X \cdot Y \cdot m + W \cdot n \cdot o + X \cdot m \cdot o) - 4 \cdot V \cdot X \cdot Y \cdot k \cdot m \cdot o \cdot (W \cdot n + X \cdot m)} + \sqrt{k \cdot l} \cdot \sqrt{U} \cdot o \cdot (W \cdot n + X \cdot m)\right]}{2 \cdot \sqrt{U} \cdot p \cdot (W \cdot n + X \cdot m) \cdot \sqrt{k \cdot l} \cdot o} = 0$$

4RST6AB2R7



Unit. $AB := 1$ **Given.** $N_1 := 2.23482$ $N_2 := 1.65368$ $N_3 := 3.56650$

$N_4 := 1.37515$ $N_5 := .55616$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

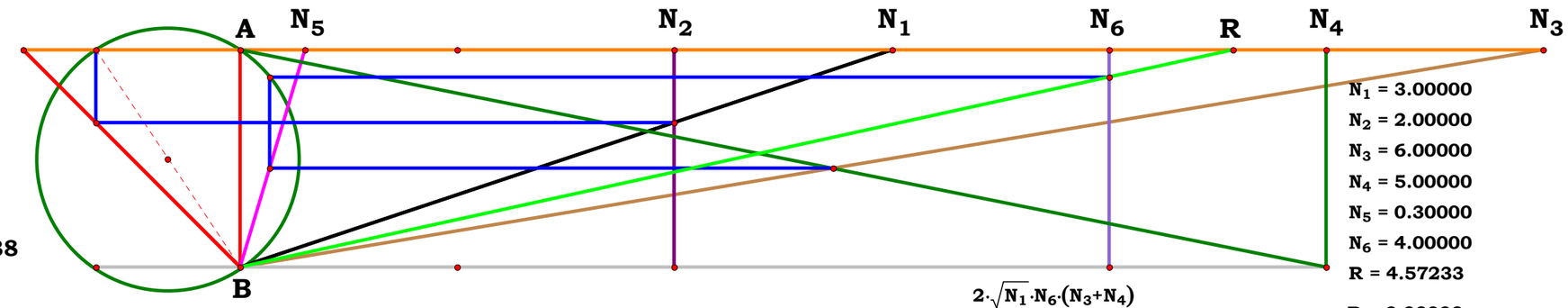
$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := AF + BP$ $GH := \sqrt{HK^2 - GK^2}$

$KP := GH + HK - EF$ $R := \frac{N_6}{KP}$ $R = 1.091738$



Definitions.

$$R - \frac{2\cdot\sqrt{N_1}\cdot N_6\cdot(N_3+N_4)}{\sqrt{N_1}\cdot(N_3+N_4)+\sqrt{N_1\cdot(N_3+N_4)^2-4\cdot N_4\cdot N_5\cdot\left[N_2\cdot(N_3+N_4)+N_1\cdot N_4\cdot N_5\right]}} = 0$$

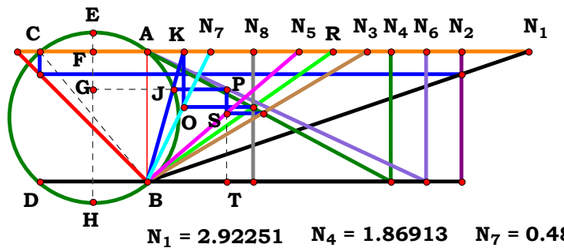
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E}{F\cdot\left[\sqrt{N_u}\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot N_u^2\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2\cdot\sqrt{U}\cdot Z\cdot o\cdot(W\cdot n+X\cdot m)\cdot\sqrt{k\cdot l}}{p\cdot\left[\sqrt{k}\cdot\sqrt{U\cdot l\cdot o^2\cdot(W\cdot n+X\cdot m)^2-4\cdot U\cdot X^2\cdot l\cdot m^2\cdot Y^2-4\cdot Y\cdot V\cdot X\cdot k\cdot m\cdot o\cdot(W\cdot n+X\cdot m)}+\sqrt{k\cdot l}\cdot\sqrt{U}\cdot o\cdot(W\cdot n+X\cdot m)\right]} = 0$$

4RST6AB2R8



$N_1 = 2.92251$ $N_4 = 1.86913$ $N_7 = 0.48626$
$N_2 = 2.40917$ $N_5 = 1.16636$ $N_8 = 0.81709$
$N_3 = 1.68746$ $N_6 = 2.14056$ $R = 1.42068$

Unit. $AB := 1$ **Given.** $N_1 := 2.92251$ $N_2 := 2.40917$ $N_3 := 1.68746$ $N_4 := 1.86913$

$N_5 := 1.16636$ $N_6 := 2.14056$ $N_7 := .48626$ $N_8 := .81709$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$

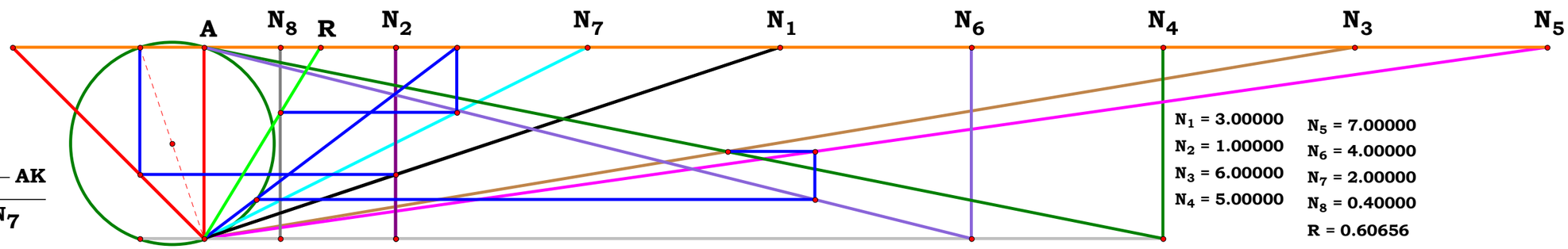
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$

$GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$ $KO := \frac{N_7 - AK}{N_7}$



$N_1 = 3.00000$ $N_5 = 7.00000$
$N_2 = 1.00000$ $N_6 = 4.00000$
$N_3 = 6.00000$ $N_7 = 2.00000$
$N_4 = 5.00000$ $N_8 = 0.40000$
$R = 0.60656$

$R := \frac{N_8}{AB - KO}$ $R = 1.420686$

B

$$\frac{(2 \cdot N_1 \cdot N_7 \cdot N_8 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6))}{\sqrt{(N_2 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - (N_2 \cdot N_6 \cdot (N_3 + N_4))} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_1 \cdot N_7 \cdot N_8 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{\sqrt{N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_1^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot (N_3 + N_4)} = 0$$

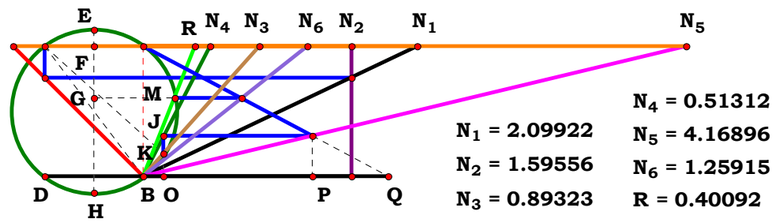
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{2 \cdot B \cdot N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)}{G \cdot H \cdot \left[\sqrt{E^2 \cdot A^2 \cdot (C + D)^2 + 4 \cdot E \cdot B^2 \cdot C \cdot F \cdot (C + D) - 4 \cdot B^2 \cdot C^2 \cdot F^2} - A \cdot E \cdot (C + D)\right]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot S \cdot Y \cdot Z \cdot j \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{o \cdot p \cdot \left[\sqrt{4 \cdot S^2 \cdot V \cdot W \cdot j^2 \cdot k \cdot n \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m) + T^2 \cdot X^2 \cdot h^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - T \cdot X \cdot h \cdot m \cdot (U \cdot l + V \cdot k)\right]} = 0$$

4RST6AB2R9



$N_1 = 2.09922$
$N_2 = 1.59556$
$N_3 = 0.89323$
$N_4 = 0.51312$
$N_5 = 4.16896$
$N_6 = 1.25915$
$R = 0.40092$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.59556$ $N_3 := .89323$

$N_4 := .51312$ $N_5 := 4.16896$ $N_6 := 1.25915$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

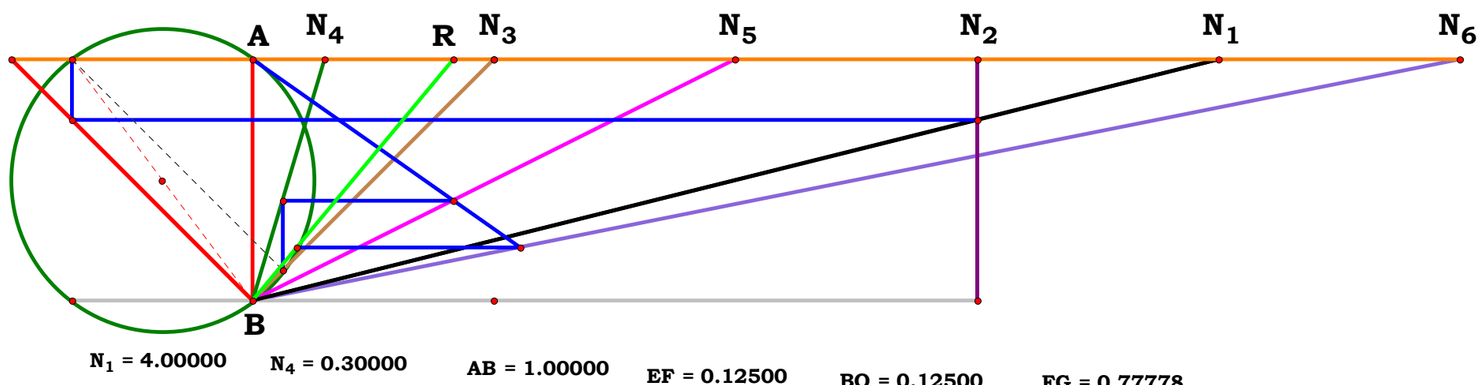
$KN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$

$JO := \frac{BO}{N_4}$ $BP := N_5 \cdot JO$

$BQ := \frac{BP \cdot AB}{AB - JO}$ $FG := \frac{N_6}{BQ + N_6}$

$EG := FG + EF$ $GM := \sqrt{EG \cdot (EH - EG)}$

$R := \frac{GM - AF}{AB - FG}$ $R = 0.400923$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.30000$
$N_5 = 2.00000$
$N_6 = 5.00000$
$R = 0.83196$
$AB = 1.00000$
$AC = 0.75000$
$EH = 1.25000$
$AF = 0.37500$
$EF = 0.12500$
$BN_3 = 1.41421$
$CN_3 = 1.75000$
$KN_3 = 1.23744$
$BO = 0.12500$
$JO = 0.41667$
$BP = 0.83333$
$BQ = 1.42857$
$FG = 0.77778$
$EG = 0.90278$
$GM = 0.55988$
$R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

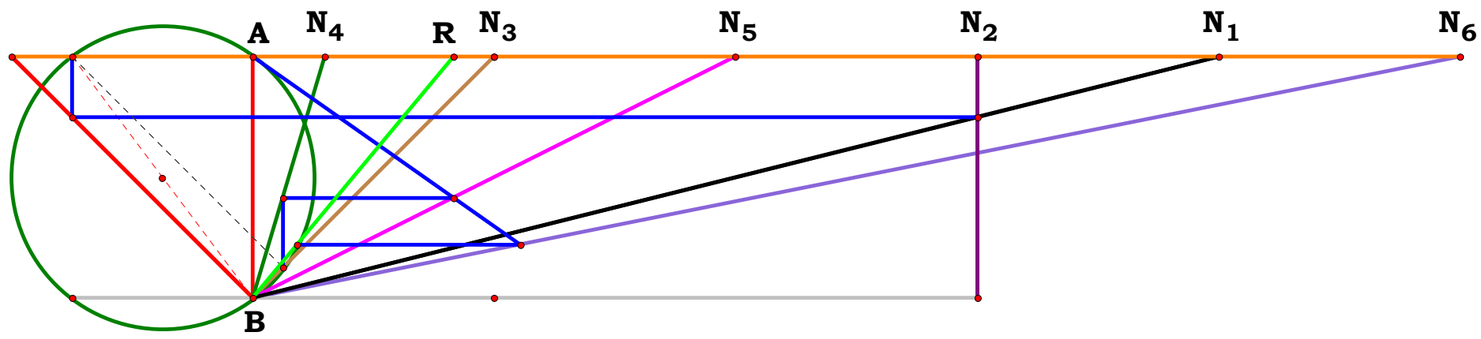
$$R - \frac{\begin{array}{l}\sqrt{N_1^2 \cdot N_2^2 \cdot N_4^2 \cdot N_6^2 \cdot \left(N_3^2 + 1\right)^2 - N_3^2 \cdot \left(N_1 - N_2 \cdot N_3\right)^2 \cdot \left[2 \cdot N_5 \cdot N_6 \cdot \left(2 \cdot N_1^2 + N_2^2\right) - N_2^2 \cdot \left(N_5^2 + N_6^2\right)\right]} \ \ldots \cdot N_1^2 \ \ldots \\ + \ 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot N_6 \cdot \left(N_1 - N_2 \cdot N_3\right) \cdot \left(N_3^2 + 1\right) \cdot \left(2 \cdot N_1^2 \cdot N_5 + N_2^2 \cdot N_5 - N_2^2 \cdot N_6\right) \\ + \ -\sqrt{N_1^4} \cdot N_2 \cdot \left[N_1 \cdot N_4 \cdot N_6 \cdot \left(N_3^2 + 1\right) + N_3 \cdot \left(N_5 - N_6\right) \cdot \left(N_1 - N_2 \cdot N_3\right)\right]\end{array}}{2 \cdot N_1 \cdot N_3 \cdot N_5 \cdot \left(N_1 - N_2 \cdot N_3\right) \cdot \sqrt{N_1^4}} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{A \cdot F \cdot D \cdot \left(B \cdot C - A \cdot N_u\right) + A \cdot E \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot {N_u}^2 + A \cdot D \cdot N_u\right) - \sqrt{\begin{matrix} A^2 \cdot E^2 \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot {N_u}^2 + A \cdot D \cdot N_u\right)^2 + A^2 \cdot D^2 \cdot F^2 \cdot \left(B \cdot C - A \cdot N_u\right)^2 \ \ldots \\ + \ 2 \cdot D \cdot E \cdot F \cdot \left(A^2 + 2 \cdot B^2\right) \cdot \left(B \cdot C - A \cdot N_u\right) \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot {N_u}^2 + A \cdot D \cdot N_u\right) \end{matrix}}}{2 \cdot B \cdot D \cdot F \cdot \left(A \cdot N_u - B \cdot C\right)} = 0$$

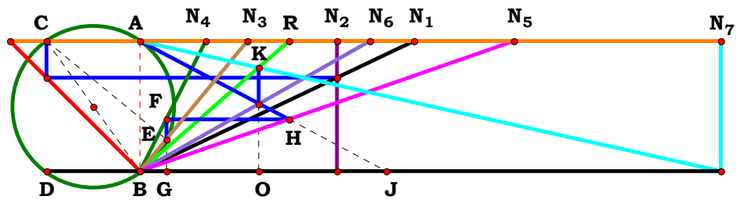
$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{\begin{matrix} \sqrt{\begin{matrix} X^2 \cdot U^2 \cdot V^2 \cdot Z^2 \cdot k^2 \cdot l^2 \cdot o^2 \cdot \left(W^2 + m^2\right)^2 \ \ldots \\ + \ 2 \cdot X \cdot U \cdot W \cdot Z \cdot l \cdot n \cdot o \cdot \left(W^2 + m^2\right) \cdot (U \cdot l \cdot m - V \cdot W \cdot k) \cdot \left(2 \cdot U^2 \cdot Y \cdot l^2 \cdot p + V^2 \cdot Y \cdot k^2 \cdot p - V^2 \cdot Z \cdot k^2 \cdot o\right) \ \ldots \\ + \ -W^2 \cdot n^2 \cdot (U \cdot l \cdot m - V \cdot W \cdot k)^2 \cdot \left(4 \cdot U^2 \cdot Y \cdot Z \cdot l^2 \cdot o \cdot p - V^2 \cdot Y^2 \cdot k^2 \cdot p^2 + 2 \cdot V^2 \cdot Y \cdot Z \cdot k^2 \cdot o \cdot p - V^2 \cdot Z^2 \cdot k^2 \cdot o^2\right) \end{matrix}} \\ - V \cdot k \cdot \begin{bmatrix} U \cdot l \cdot \begin{bmatrix} X \cdot Z \cdot o \cdot \left(W^2 + m^2\right) \ \ldots \\ + \ W \cdot m \cdot n \cdot (Y \cdot p - Z \cdot o) \end{bmatrix} \ \ldots \\ + \ -V \cdot W^2 \cdot k \cdot n \cdot (Y \cdot p - Z \cdot o) \end{bmatrix} \end{matrix}}{2 \cdot U \cdot W \cdot Y \cdot l \cdot n \cdot p \cdot (U \cdot l \cdot m - V \cdot W \cdot k)} = 0$$



$N_1 = 4.00000$	$N_4 = 0.30000$	AB = 1.00000	EF = 0.12500	BO = 0.12500	FG = 0.77778
$N_2 = 3.00000$	$N_5 = 2.00000$	AC = 0.75000	$BN_3 = 1.41421$	JO = 0.41667	EG = 0.90278
$N_3 = 1.00000$	$N_6 = 5.00000$	EH = 1.25000	$CN_3 = 1.75000$	BP = 0.83333	GM = 0.55988
	R = 0.83196	AF = 0.37500	$KN_3 = 1.23744$	BQ = 1.42857	$R - \frac{GM - AF}{AB - FG} = 0.00000$

4RST6AB2R10



$N_1 = 2.09922$ $N_3 = 0.82543$ $N_5 = 2.87106$ $N_7 = 4.45743$

$N_2 = 1.50839$ $N_4 = 0.50343$ $N_6 = 1.76281$ $R = 1.14623$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .82543$ $N_4 := .50343$

$N_5 := 2.87106$ $N_6 := 1.76281$ $N_7 := 4.45743$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

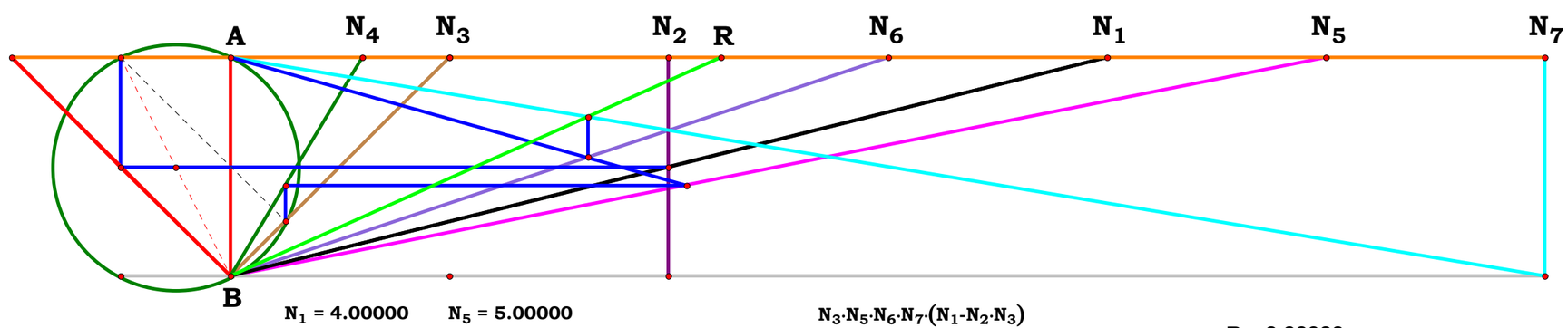
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$FH := N_5 \cdot FG$ $BJ := \frac{FH}{(AB - FG)}$

$BO := \frac{N_6 \cdot BJ}{N_6 + BJ}$ $KO := \frac{N_7 - BO}{N_7}$

$R := \frac{BO}{KO}$ $R = 1.146228$



$N_1 = 4.00000$ $N_5 = 5.00000$

$N_2 = 2.00000$ $N_6 = 3.00000$

$N_3 = 1.00000$ $N_7 = 6.00000$

$N_4 = 0.60000$ $R = 2.23881$

$$\frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_1 - N_2 \cdot N_3)}{N_6 \cdot N_7 \cdot (N_1 \cdot N_4 \cdot (N_3^2+1) - N_3 \cdot (N_1 - N_2 \cdot N_3)) - N_3 \cdot N_5 \cdot (N_6 - N_7) \cdot (N_1 - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_1 - N_2 \cdot N_3)}{N_6 \cdot N_7 \cdot \left[N_1 \cdot N_4 \cdot \left(N_3^2 + 1\right) - N_3 \cdot (N_1 - N_2 \cdot N_3)\right] - N_3 \cdot N_5 \cdot (N_6 - N_7) \cdot (N_1 - N_2 \cdot N_3)} = 0$$

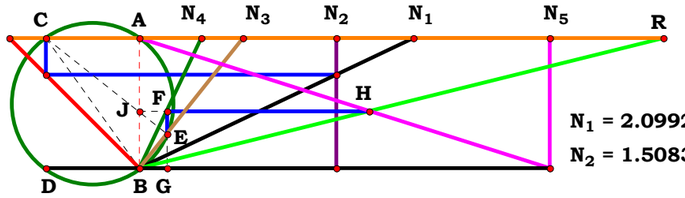
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{D \cdot N_u \cdot (B \cdot C - A \cdot N_u)}{E \cdot \left[B \cdot C \cdot (C - D) + N_u \cdot (A \cdot D + B \cdot N_u)\right] + D \cdot (F - G) \cdot (B \cdot C - A \cdot N_u)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (T \cdot k \cdot l - U \cdot V \cdot j)}{W \cdot T \cdot Y \cdot Z \cdot k \cdot n \cdot \left(V^2 + l^2\right) + V \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n) \cdot (U \cdot V \cdot j - T \cdot k \cdot l)} = 0$$

4RST6AB2R11



$N_3 = 0.79637$
$N_4 = 0.47437$
$N_1 = 2.09922$ $N_5 = 3.15195$
$N_2 = 1.50839$ $R = 4.02072$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .79637$

$N_4 := .47437$ $N_5 := 3.15195$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

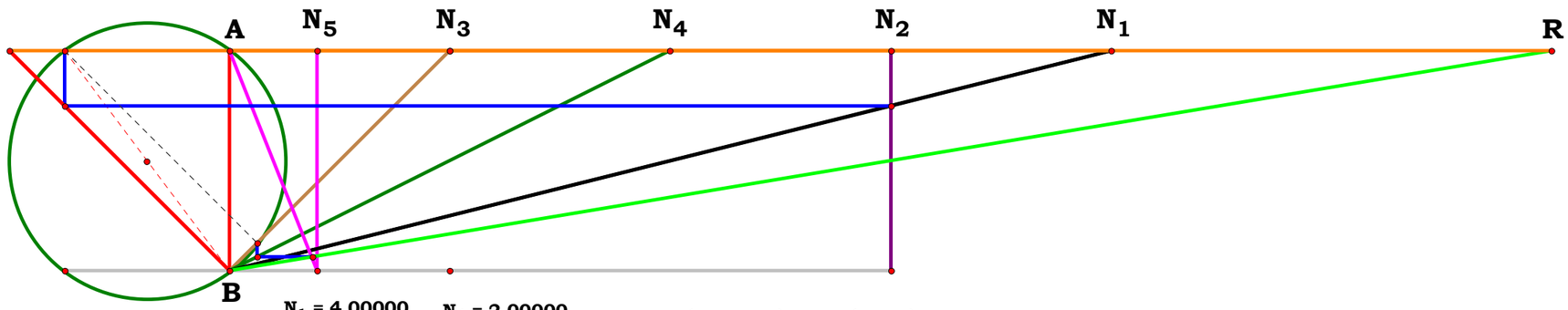
Descriptions.

$AC := \frac{N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$

$FG := \frac{BG}{N_4}$ $HJ := N_5 \cdot (AB - FG)$

$R := \frac{HJ}{FG}$ $R = 4.02067$



$N_1 = 4.00000$ $N_4 = 2.00000$ $\frac{N_3^2 \cdot N_5 \cdot (N_2 + N_1 \cdot N_4) - N_1 \cdot N_5 \cdot (N_3 - N_4)}{N_3 \cdot (N_1 - N_2 \cdot N_3)} - R = 0.00000$

$N_2 = 3.00000$ $N_5 = 0.40000$

$N_3 = 1.00000$ $R = 6.00000$

Definitions.

$$R - \frac{N_3^2 \cdot N_5 \cdot (N_2 + N_1 \cdot N_4) - N_1 \cdot N_5 \cdot (N_3 - N_4)}{N_3 \cdot (N_1 - N_2 \cdot N_3)} = 0$$

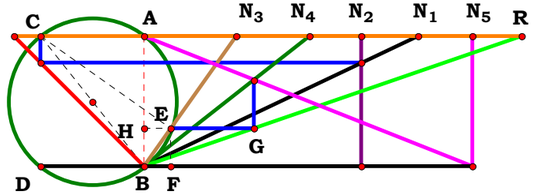
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot [B \cdot C \cdot (C - D) + B \cdot N_u^2 + A \cdot D \cdot N_u]}{D \cdot E \cdot (B \cdot C - A \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (V \cdot X^2 \cdot Y \cdot m + V \cdot Y \cdot m \cdot n^2 + W \cdot X^2 \cdot l \cdot o - V \cdot X \cdot m \cdot n \cdot o)}{X \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l)} = 0$$

4RST6AB2R12



$N_1 = 2.09922$
$N_2 = 1.66336$
$N_3 = 0.70920$
$N_4 = 1.26861$
$N_5 = 2.52237$
$R = 2.89606$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.66336$ $N_3 := .70920$

$N_4 := 1.26861$ $N_5 := 2.52237$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

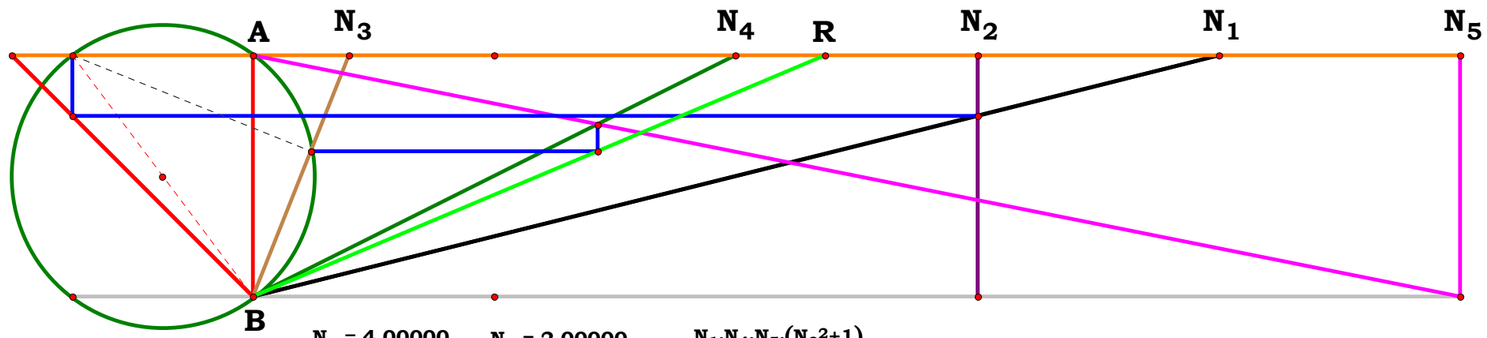
Descriptions.

$AC := \frac{N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 2.896074$



$N_1 = 4.00000$ $N_4 = 2.00000$ $\frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{(N_1 - N_2 \cdot N_3) \cdot (N_4 + N_5)} - R = 0.00000$

$N_2 = 3.00000$ $N_5 = 5.00000$

$N_3 = 0.40000$ $R = 2.36735$

Definitions.

$$R - \frac{N_1 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_1 - N_2 \cdot N_3) \cdot (N_4 + N_5)} = 0$$

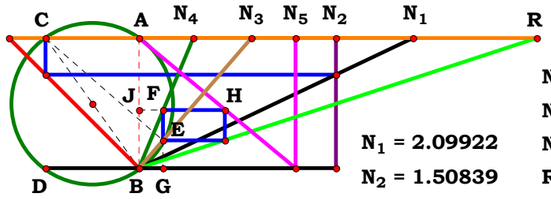
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{B \cdot N_u \cdot (C^2 + N_u^2)}{C \cdot (D + E) \cdot (B \cdot C - A \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot m \cdot (X^2 + n^2)}{n \cdot (V \cdot m \cdot n - W \cdot X \cdot l) \cdot (Y \cdot p + Z \cdot o)} = 0$$

4RST6AB2R13



$N_3 = 0.86417$
$N_4 = 0.41626$
$N_5 = 1.20511$
$N_1 = 2.09922$
$N_2 = 1.50839$
$R = 3.05165$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .86417$

$N_4 := .41626$ $N_5 := 1.20511$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

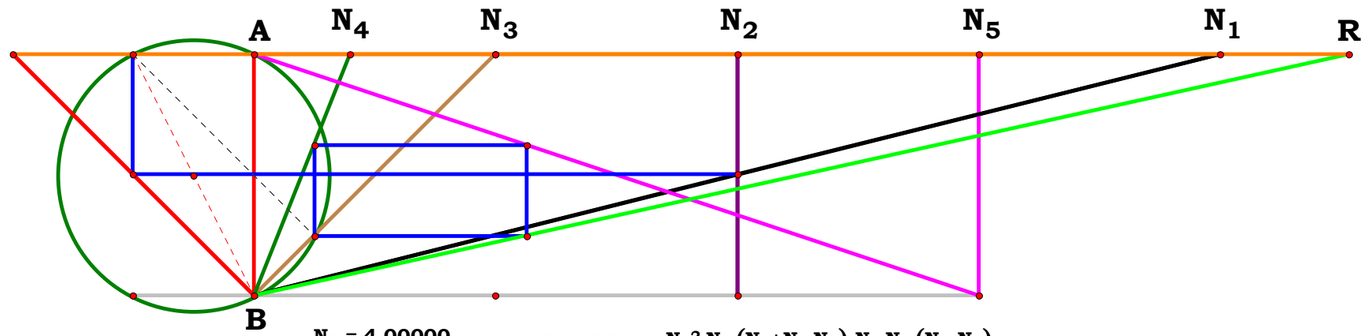
$AC := \frac{N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$ $EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 3.051666$



$N_1 = 4.00000$
$N_2 = 2.00523$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 3.00000$
$R = 4.53146$

$\frac{N_3^2 \cdot N_5 \cdot (N_2 + N_1 \cdot N_4) - N_1 \cdot N_5 \cdot (N_3 - N_4)}{N_1 \cdot N_4 - N_2 \cdot N_3 \cdot N_4} - R = 0.00000$

Definitions.

$$R - \frac{N_3^2 \cdot N_5 \cdot (N_2 + N_1 \cdot N_4) - N_1 \cdot N_5 \cdot (N_3 - N_4)}{N_1 \cdot N_4 - N_2 \cdot N_3 \cdot N_4} = 0$$

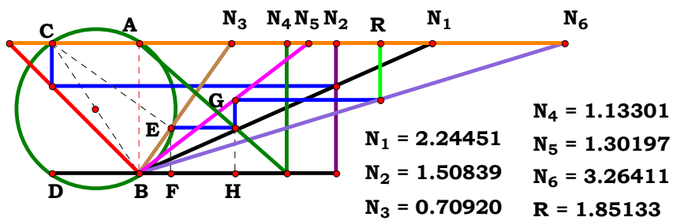
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^2 + A \cdot D \cdot N_u)}{C \cdot E \cdot (B \cdot C - A \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot [V \cdot Y \cdot m \cdot (X^2 + n^2) + X \cdot o \cdot (W \cdot X \cdot l - V \cdot m \cdot n)]}{V \cdot Y \cdot m \cdot n^2 \cdot p - W \cdot X \cdot Y \cdot l \cdot n \cdot p} = 0$$

4RST6AB2R14



$N_1 = 2.24451$ $N_2 = 1.50839$ $N_3 = 0.70920$ $N_4 = 1.13301$ $N_5 = 1.30197$ $N_6 = 3.26411$ $R = 1.85133$

Unit. $AB := 1$ **Given.** $N_1 := 2.24451$ $N_2 := 1.50839$ $N_3 := .70920$ $N_4 := 1.13301$ $N_5 := 1.30197$ $N_6 := 3.26411$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

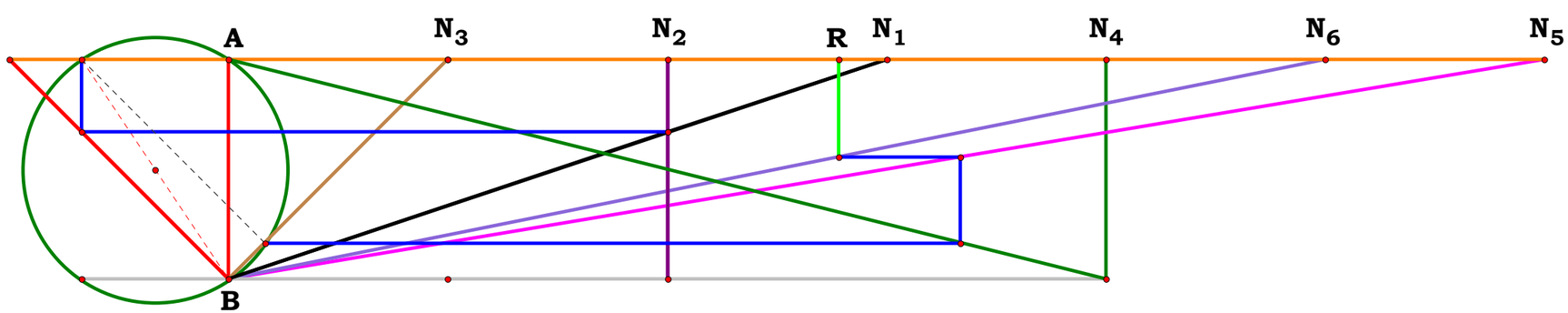
$AC := \frac{N_2}{N_1}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - EF)$

$GH := \frac{BH}{N_5}$ $R := N_6 \cdot GH$

$R = 1.851336$



Definitions.

$N_1 = 3.00000$ $N_2 = 2.00523$ $N_3 = 1.00000$ $N_4 = 4.00000$ $N_5 = 6.00000$ $N_6 = 5.00000$ $R = 2.78068$

$\frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_2 + N_1 \cdot N_3)}{N_1 \cdot N_5 \cdot (N_3^2 + 1)} - R = 0.00000$

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot \left(N_2 + N_1 \cdot N_3\right)}{N_1 \cdot N_5 \cdot \left(N_3^2 + 1\right)} = 0$$

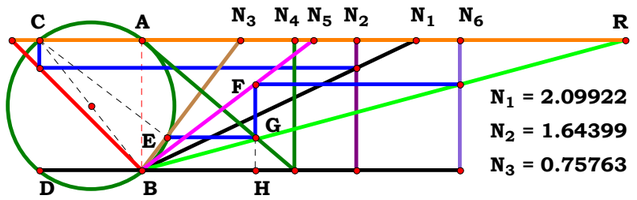
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot \left(A \cdot C + B \cdot N_u\right)}{F \cdot \left[B \cdot D \cdot \left(C^2 + N_u^2\right)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (U \cdot W \cdot l + V \cdot k \cdot m)}{p \cdot \left(U \cdot Y \cdot l \cdot n \cdot W^2 + U \cdot Y \cdot l \cdot n \cdot m^2\right)} = 0$$

4RST6AB2R15



$N_1 = 2.09922$
$N_2 = 1.64399$
$N_3 = 0.75763$
$N_4 = 1.17175$
$N_5 = 1.32134$
$N_6 = 2.44082$
$R = 3.71129$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BN_3 := \sqrt{N_3^2 + AB^2}$$

$$CN_3 := N_3 + AC \qquad EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$GH := \frac{BN_3 - EN_3}{BN_3} \qquad BH := N_4 \cdot (AB - GH)$$

$$FH := \frac{BH}{N_5} \qquad R := \frac{N_6}{FH} \qquad R = 3.711292$$

Definitions.

$$R - \frac{N_1 \cdot N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(N_2 + N_1 \cdot N_3\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{B \cdot D \cdot \left(C^2 + N_u^2\right)}{E \cdot F \cdot \left(A \cdot C + B \cdot N_u\right)} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{U \cdot Y \cdot Z \cdot l \cdot n \cdot \left(W^2 + m^2\right)}{o \cdot p \cdot W \cdot X \cdot (U \cdot W \cdot l + V \cdot k \cdot m)} = 0$$

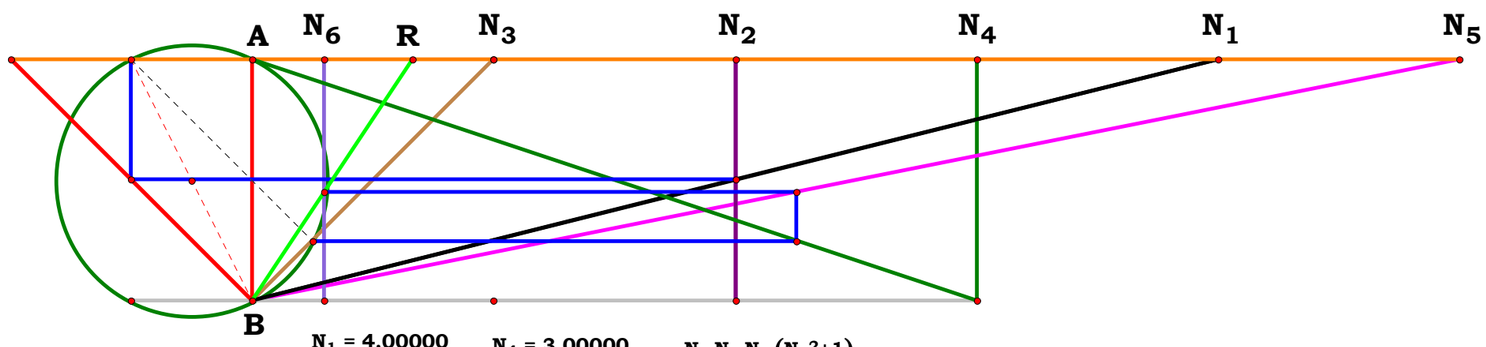
Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.64399$ $N_3 := .75763$

$N_4 := 1.17175$ $N_5 := 1.32134$ $N_6 := 2.44082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

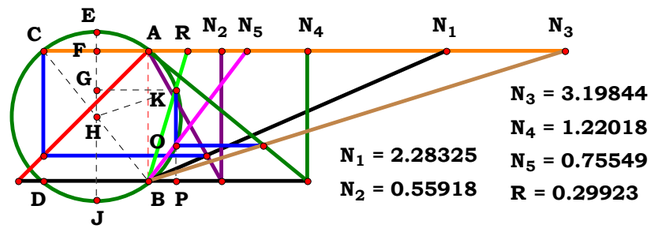
$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 4.00000$
$N_2 = 2.00523$
$N_3 = 1.00000$
$N_4 = 3.00000$
$N_5 = 5.00000$
$N_6 = 0.30000$
$R = 0.66609$

$$\frac{N_1 \cdot N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(N_2 + N_1 \cdot N_3\right)} - R = 0.00000$$

4RST6AB3R0



Unit. $AB := 1$ Given. $N_1 := 2.28325$ $N_2 := .55918$ $N_3 := 3.19844$

$N_4 := 1.22018$ $N_5 := .75549$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

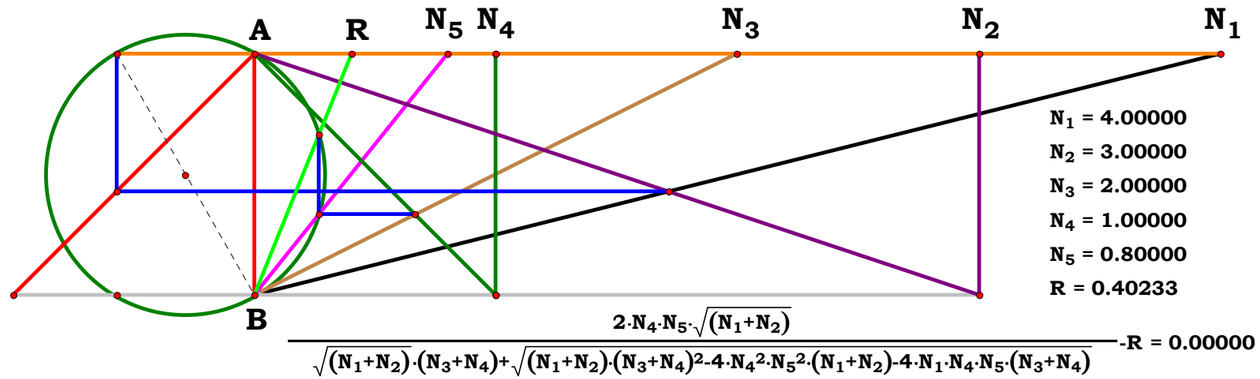
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := BP + AF$ $HK := \frac{EJ}{2}$

$GH := \sqrt{HK^2 - GK^2}$ $KO := \frac{AB}{2} + GH$

$R := \frac{BP}{KO}$ $R = 0.299227$



Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{N_1 + N_2}}{\sqrt{N_1 + N_2} \cdot (N_3 + N_4) + \sqrt{(N_1 + N_2) \cdot (N_3 + N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 + N_2) - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4)}} = 0$$

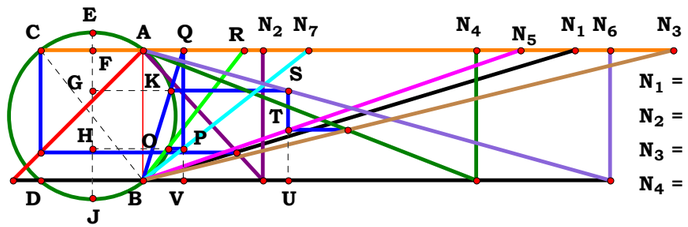
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A + B)} \cdot \sqrt{B} \cdot \sqrt{A}}{\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (C + D)^2 \cdot (A + B) - \left[4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C + D) + C \cdot N_u \cdot (A + B)\right]\right]\right]} + \sqrt{\left[N_u \cdot (A + B)\right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C + D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot n \cdot \sqrt{V \cdot m + W \cdot l}}{\sqrt{p^2 \cdot (X \cdot o + Y \cdot n)^2 \cdot (V \cdot m + W \cdot l) - 4 \cdot Z^2 \cdot Y^2 \cdot n^2 \cdot (V \cdot m + W \cdot l) - 4 \cdot Z \cdot V \cdot Y \cdot m \cdot n \cdot p \cdot (X \cdot o + Y \cdot n)} + \sqrt{V \cdot m + W \cdot l} \cdot p \cdot (X \cdot o + Y \cdot n)} = 0$$

4RST6AB3R1



N1 = 3.30995
N2 = 0.91756
N3 = 4.07016
N4 = 2.55682
N5 = 2.89605
N6 = 3.58480
N7 = 1.26704
R = 0.77383

Unit. $AB := 1$ Given. $N_1 := 3.330995$ $N_2 := .91756$ $N_3 := 4.07016$ $N_4 := 2.55682$ $N_5 := 2.89605$ $N_6 := 3.58480$ $N_7 := 1.26704$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4} \qquad BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

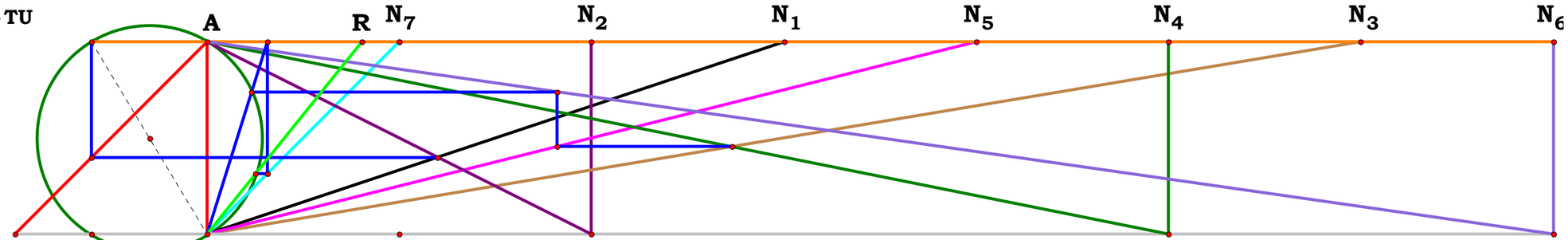
$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.77342$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 6.00000$
$N_4 = 5.00000$
$N_5 = 4.00000$
$N_6 = 7.00000$
$N_7 = 1.00000$
$R = 0.80688$

$\frac{N_1}{N_1+N_2} = 0.60000$
$\sqrt{1^2+AC^2} = 1.16619$
$\frac{AC}{2} = 0.30000$
$\frac{EJ-1}{2} = 0.08310$
$\frac{N_4}{N_3+N_4} = 0.45455$

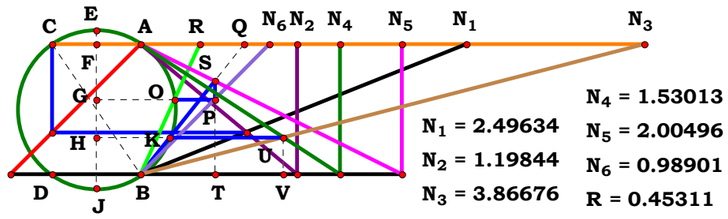
$N_5 \cdot TU = 1.81818$
$\frac{N_6-BU}{N_6} = 0.74026$
$SU+EF = 0.82335$
$\sqrt{GJ \cdot (EJ-GJ)} = 0.53130$
$\frac{GK-AF}{SU} = 0.31245$
$\frac{AQ}{N_7} = 0.31245$

$PV+EF = 0.39555$
$\sqrt{HJ \cdot (EJ-HJ)} = 0.55211$
$R-\frac{HO-AF}{PV} = 0.00000$

$AC = 0.60000$
$EJ = 1.16619$
$AF = 0.30000$
$EF = 0.08310$
$TU = 0.45455$
$BU = 1.81818$

$SU = 0.74026$
$GJ = 0.82335$
$GK = 0.53130$
$AQ = 0.31245$
$PV = 0.31245$
$HJ = 0.39555$
$HO = 0.55211$

4RST6AB3R2



$N_1 = 2.49634$
$N_2 = 1.19844$
$N_3 = 3.86676$
$N_4 = 1.53013$
$N_5 = 2.00496$
$N_6 = 0.98901$
$R = 0.45311$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 1.19844$ $N_3 := 3.86676$
$N_4 := 1.53013$ $N_5 := 2.00496$ $N_6 := .98901$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

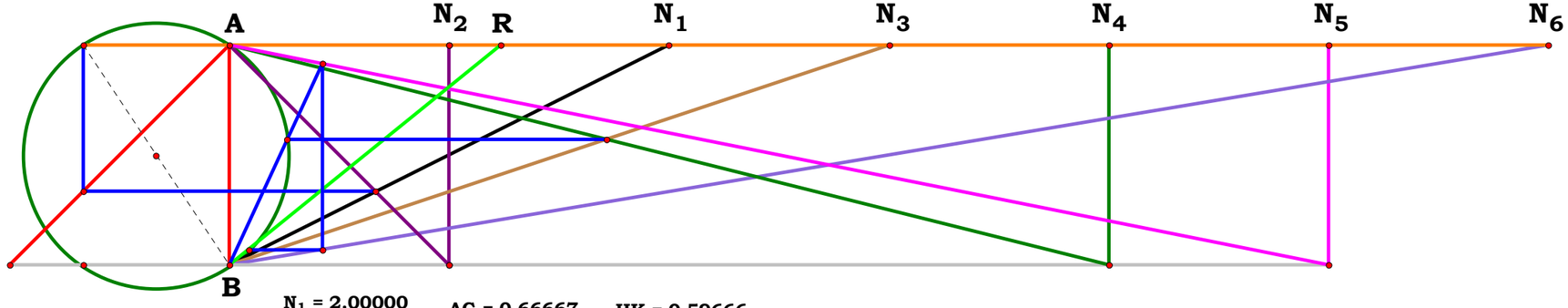
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.453111$$



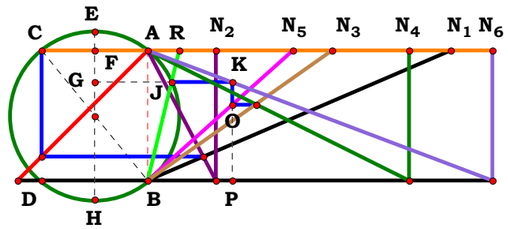
$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$N_6 = 6.00000$
$R = 1.23391$

$AC = 0.66667$
$EJ = 1.20185$
$AF = 0.33333$
$EF = 0.10093$
$UV = 0.57143$
$HJ = 0.67235$

$HK = 0.59666$
$AQ = 0.46083$
$BT = 0.42194$
$PT = 0.07032$
$GJ = 0.17125$
$GO = 0.42011$

$R\text{-}\frac{GO\text{-}AF}{PT} = 0.00000$

4RST6AB3R3



$N_1 = 2.32200$
$N_2 = 0.52044$
$N_3 = 1.41626$
$N_4 = 2.00473$
$N_5 = 1.11387$
$N_6 = 2.64528$
$R = 0.24618$

Unit. $AB := 1$ **Given.** $N_1 := 2.32200$ $N_2 := .52044$ $N_3 := 1.41626$

$N_4 := 2.00473$ $N_5 := 1.11387$ $N_6 := 2.64528$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

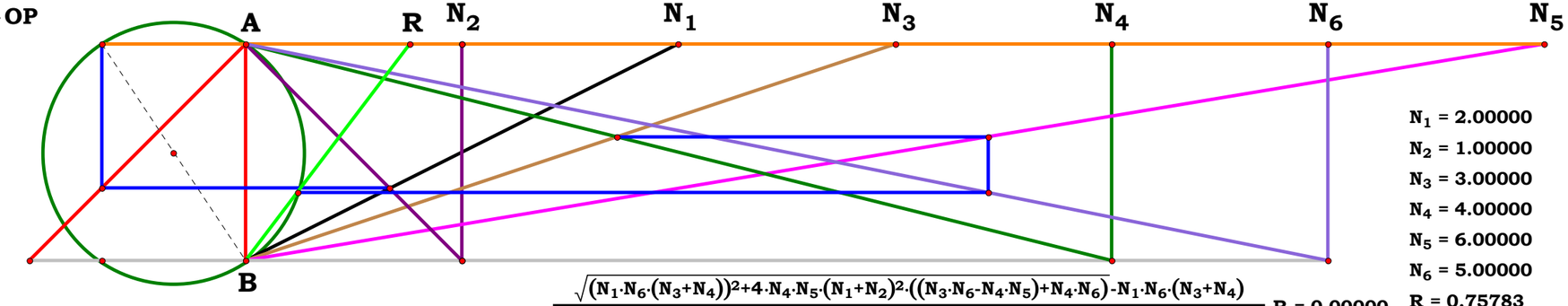
$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$KP := AB - \frac{BP}{N_6}$ $GH := KP + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GJ - AF}{KP}$ $R = 0.24618$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 6.00000$
$N_6 = 5.00000$
$R = 0.75783$

$$\frac{\sqrt{(N_1 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

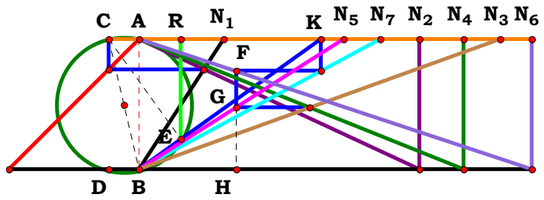
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{4 \cdot C \cdot F \cdot (A + B)^2 \cdot [C \cdot (E - F) + D \cdot E] + B^2 \cdot E^2 \cdot (C + D)^2} - B \cdot E \cdot (C + D)}{2 \cdot (A + B) \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot X \cdot Y \cdot m \cdot p \cdot (U \cdot l + V \cdot k)^2 \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o) + U^2 \cdot Z^2 \cdot l^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2} - U \cdot Z \cdot l \cdot o \cdot (W \cdot n + X \cdot m)}{2 \cdot (U \cdot l + V \cdot k) \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

4RST6AB3R4



$N_1 = 0.64635$ $N_4 = 2.48902$ $N_7 = 1.84818$
$N_2 = 2.14765$ $N_5 = 1.56910$ $R = 0.32109$
$N_3 = 2.77227$ $N_6 = 3.01334$

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.14765$ $N_3 := 2.77227$ $N_4 := 2.48902$

$N_5 := 1.56910$ $N_6 := 3.01334$ $N_7 := 1.84818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $GH := \frac{N_4}{N_3 + N_4}$

$BH := N_5 \cdot GH$ $FH := \frac{N_6 - BH}{N_6}$ $AK := N_7 \cdot FH$

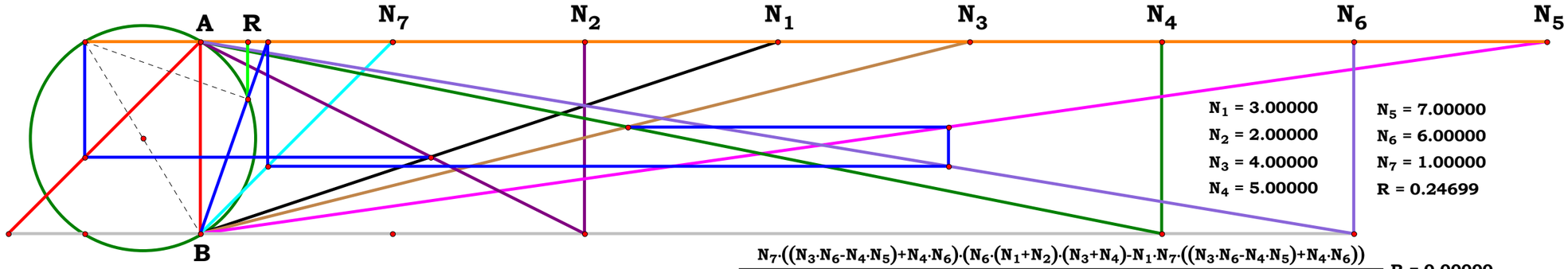
$BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$

$EK := \frac{AK \cdot CK}{BK}$

$R := AK \cdot \frac{(BK - EK)}{BK}$

$R = 0.321095$



$N_1 = 3.00000$ $N_5 = 7.00000$
$N_2 = 2.00000$ $N_6 = 6.00000$
$N_3 = 4.00000$ $N_7 = 1.00000$
$N_4 = 5.00000$ $R = 0.24699$

$N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) \cdot (N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4) - N_1 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6))$

$\frac{N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) \cdot (N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4) - N_1 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6))}{(N_1 + N_2) \cdot (N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) \cdot [N_6 \cdot (N_3 + N_4) \cdot (N_1 + N_2) - N_1 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)]}{(N_1 + N_2) \cdot [N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2]} = 0$$

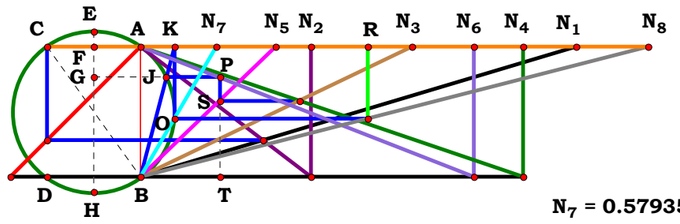
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot [G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]]}{(A + B) \cdot [G^2 \cdot E^2 \cdot (C + D)^2 + N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2]} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot [T \cdot W \cdot X \cdot Z \cdot k \cdot l \cdot o - Y \cdot n \cdot (V \cdot m + W \cdot l) \cdot (T \cdot Z \cdot k - T \cdot k \cdot p - U \cdot j \cdot p)]}{(T \cdot k + U \cdot j) \cdot [Z^2 \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)^2 + Y^2 \cdot n^2 \cdot p^2 \cdot (V \cdot m + W \cdot l)^2]} = 0$$

4RST6AB3R5



$N_1 = 3.33900$ $N_3 = 2.08458$ $N_5 = 1.03638$ $N_7 = 0.57935$ $N_8 = 3.89782$

$N_2 = 1.30499$ $N_4 = 2.93456$ $N_6 = 2.55810$ $R = 1.73929$

Unit. $AB := 1$ **Given.** $N_1 := 3.33900$ $N_2 := 1.30499$ $N_3 := 2.08458$ $N_4 := 2.93456$

$N_5 := 1.03638$ $N_6 := 2.55810$ $N_7 := .57935$ $N_8 := 3.89782$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$ $GH := PT + EF$

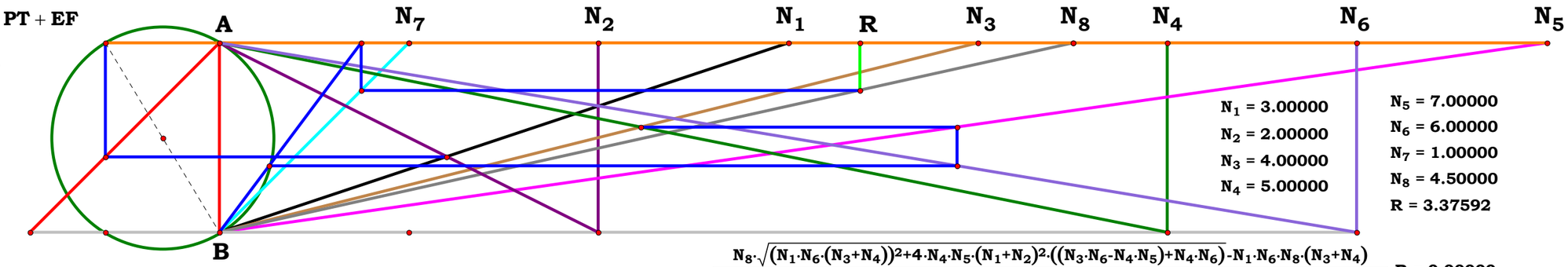
$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{(GJ - AF)}{PT}$

$KO := \frac{N_7 - AK}{N_7}$

$R := N_8 \cdot (AB - KO)$

$R = 1.739282$



$N_1 = 3.00000$ $N_5 = 7.00000$

$N_2 = 2.00000$ $N_6 = 6.00000$

$N_3 = 4.00000$ $N_7 = 1.00000$

$N_4 = 5.00000$ $N_8 = 4.50000$

$R = 3.37592$

$$\frac{N_8 \cdot \sqrt{(N_1 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot N_8 \cdot (N_3 + N_4)}{2 \cdot N_7 \cdot (N_1 + N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{N_8 \cdot \left[\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)\right]}{2 \cdot (N_1 + N_2) \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

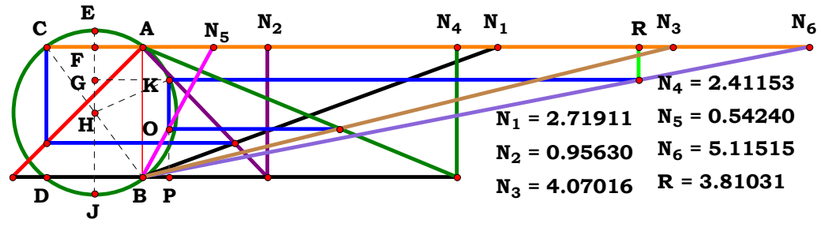
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - -\frac{G \cdot \left[B \cdot C \cdot E - \sqrt{B^2 \cdot E^2 \cdot (C + D)^2 + 4 \cdot C \cdot F \cdot (A + B)^2 \cdot (C \cdot E - C \cdot F + D \cdot E)} + B \cdot D \cdot E\right]}{2 \cdot H \cdot (A + B) \cdot [C \cdot (E - F) + D \cdot E]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot o \cdot \left[\sqrt{4 \cdot V \cdot W \cdot k \cdot n \cdot (T \cdot h + S \cdot j)^2 \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m) + S^2 \cdot X^2 \cdot j^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - S \cdot X \cdot j \cdot m \cdot (U \cdot l + V \cdot k)\right]}{2 \cdot Y \cdot p \cdot (T \cdot h + S \cdot j) \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} = 0$$

4RST6AB3R6



Unit. $AB := 1$ Given. $N_1 := 2.71911$ $N_2 := .95630$ $N_3 := 4.07016$

$N_4 := 2.41153$ $N_5 := .54240$ $N_6 := 5.11515$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

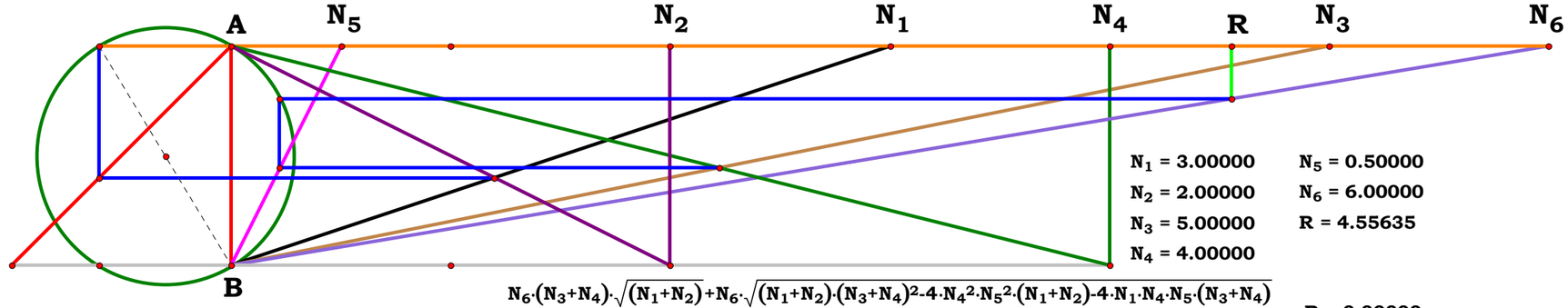
$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$

$GH := \sqrt{HK^2 - GK^2}$ $KP := GH + HK - EF$

$R := N_6 \cdot KP$ $R = 3.81033$

Definitions.



$$\frac{N_6\cdot(N_3+N_4)\cdot\sqrt{(N_1+N_2)}+N_6\cdot\sqrt{(N_1+N_2)\cdot(N_3+N_4)^2-4\cdot N_4^2\cdot N_5^2\cdot(N_1+N_2)-4\cdot N_1\cdot N_4\cdot N_5\cdot(N_3+N_4)}}{2\cdot(N_3+N_4)\cdot\sqrt{(N_1+N_2)}} - R = 0.00000$$

$$R - \frac{N_6\cdot\left[\sqrt{N_1+N_2}\cdot(N_3+N_4)+\sqrt{(N_1+N_2)\cdot(N_3+N_4)^2-4\cdot N_4^2\cdot N_5^2\cdot(N_1+N_2)-4\cdot N_1\cdot N_4\cdot N_5\cdot(N_3+N_4)}\right]}{2\cdot(N_3+N_4)\cdot\sqrt{N_1+N_2}} = 0$$

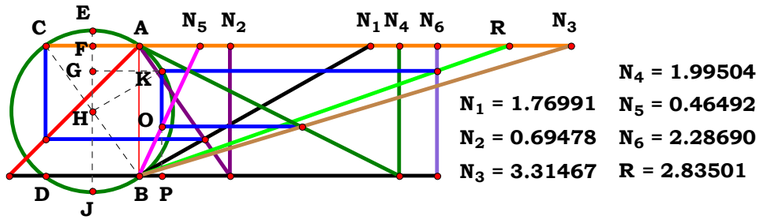
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z\cdot\left[\sqrt{o^2\cdot(W\cdot n+X\cdot m)^2\cdot(U\cdot l+V\cdot k)-4\cdot Y^2\cdot X^2\cdot m^2\cdot(U\cdot l+V\cdot k)-4\cdot Y\cdot U\cdot X\cdot l\cdot m\cdot o\cdot(W\cdot n+X\cdot m)}+\sqrt{U\cdot l+V\cdot k}\cdot o\cdot(W\cdot n+X\cdot m)\right]}{2\cdot\sqrt{U\cdot l+V\cdot k}\cdot p\cdot(W\cdot n+X\cdot m)\cdot o} = 0$$

4RST6AB3R7



$N_4 = 1.99504$
$N_1 = 1.76991$ $N_5 = 0.46492$
$N_2 = 0.69478$ $N_6 = 2.28690$
$N_3 = 3.31467$ $R = 2.83501$

Unit. $AB := 1$ **Given.** $N_1 := 1.76991$ $N_2 := .69478$ $N_3 := 3.31467$

$N_4 := 1.99504$ $N_5 := .46492$ $N_6 := 2.28690$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

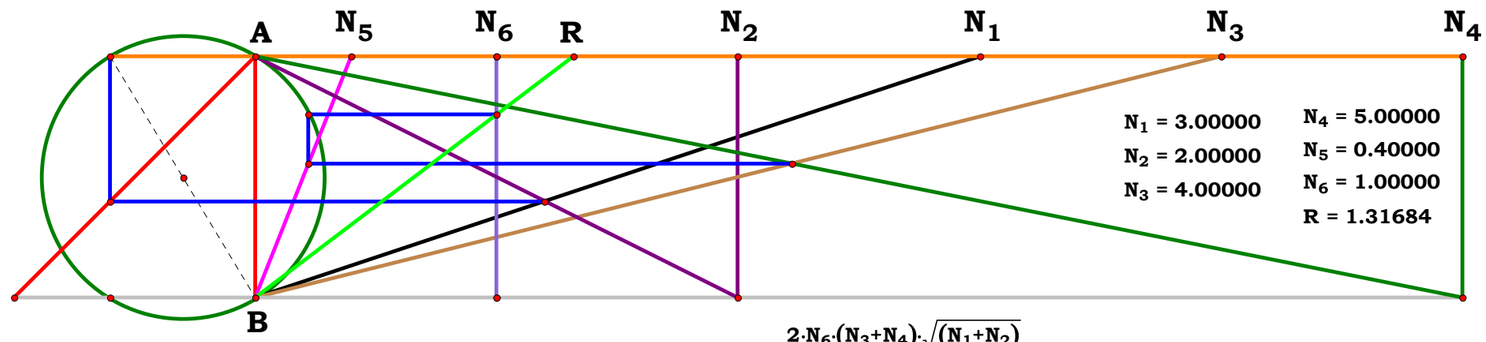
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$

$GH := \sqrt{HK^2 - GK^2}$ $KP := GH + HK - EF$

$R := \frac{N_6}{KP}$ $R = 2.835018$



$N_1 = 3.00000$ $N_4 = 5.00000$
$N_2 = 2.00000$ $N_5 = 0.40000$
$N_3 = 4.00000$ $N_6 = 1.00000$
$R = 1.31684$

$$\frac{2 \cdot N_6 \cdot (N_3+N_4) \cdot \sqrt{(N_1+N_2)}}{(N_3+N_4) \cdot \sqrt{(N_1+N_2)} + \sqrt{(N_1+N_2) \cdot (N_3+N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1+N_2) - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_3+N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_6 \cdot \sqrt{N_1 + N_2} \cdot (N_3 + N_4)}{\sqrt{N_1 + N_2} \cdot (N_3 + N_4) + \sqrt{(N_1 + N_2) \cdot (N_3 + N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 + N_2) - 4 \cdot N_1 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4)}} = 0$$

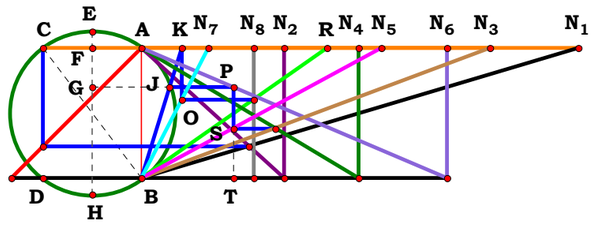
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \cdot \sqrt{B} \cdot \sqrt{A} \cdot E}{F \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot N_u^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{\left[N_u \cdot (A+B) \right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D) \right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Z \cdot \sqrt{U \cdot l + V \cdot k} \cdot (W \cdot n + X \cdot m) \cdot o}{p \cdot \left[\sqrt{o^2 \cdot (W \cdot n + X \cdot m)^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot Y \cdot U \cdot X \cdot l \cdot m \cdot o \cdot (W \cdot n + X \cdot m) - 4 \cdot Y^2 \cdot X^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)} + \sqrt{U \cdot l + V \cdot k} \cdot o \cdot (W \cdot n + X \cdot m) \right]} = 0$$

4RST6AB3R8



$N_1 = 3.34869$ $N_4 = 1.66573$ $N_7 = 0.51155$
$N_2 = 1.09190$ $N_5 = 1.84030$ $N_8 = 0.86336$
$N_3 = 2.67541$ $N_6 = 2.34502$ $R = 1.42396$

Unit. $AB := 1$ Given. $N_1 := 3.34869$ $N_2 := 1.09190$ $N_3 := 2.67541$ $N_4 := 1.66573$
$N_5 := 1.84030$ $N_6 := 2.34502$ $N_7 := .51155$ $N_8 := .86336$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

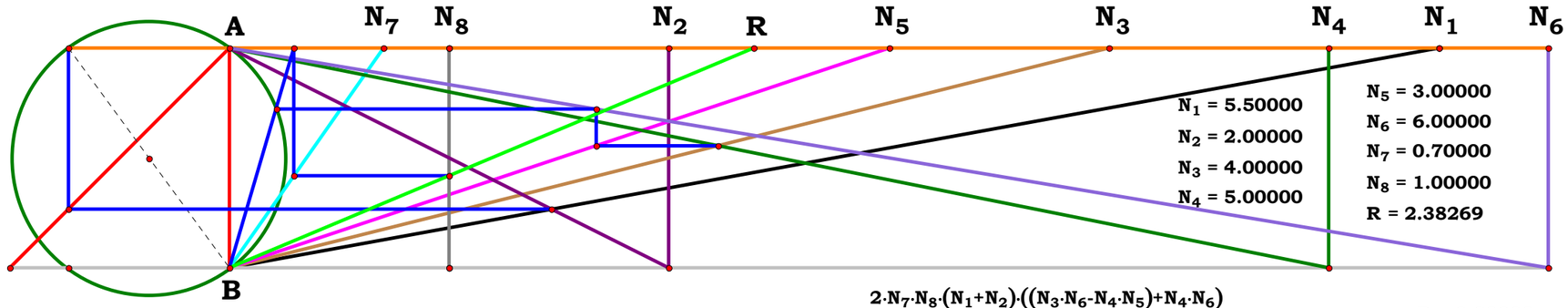
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$

$BT := N_5 \cdot ST$ $PT := \frac{N_6 - BT}{N_6}$

$GH := PT + EF$ $GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$ $KO := \frac{N_7 - AK}{N_7}$

$R := \frac{N_8}{AB - KO}$ $R = 1.423963$



$$\frac{2 \cdot N_7 \cdot N_8 \cdot (N_1+N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{\sqrt{(N_1 \cdot N_6 \cdot (N_3+N_4))^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1+N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3+N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_7 \cdot N_8 \cdot (N_1 + N_2) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)} = 0$$

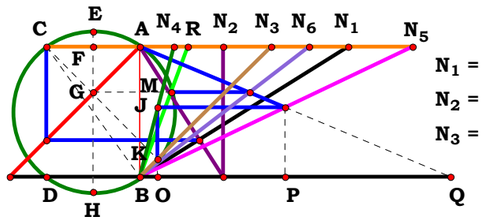
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot (A + B) \cdot [C \cdot (F - E) - D \cdot E]}{G \cdot H \cdot \left[B \cdot E \cdot (C + D) - \sqrt{B^2 \cdot E^2 \cdot (C + D)^2 + 4 \cdot C \cdot F \cdot (A + B)^2 \cdot [C \cdot (E - F) + D \cdot E]}\right]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot (T \cdot h + S \cdot j) \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{o \cdot p \cdot \left[\sqrt{X^2 \cdot S^2 \cdot j^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2 + 4 \cdot V \cdot W \cdot k \cdot n \cdot (T \cdot h + S \cdot j)^2 \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} - S \cdot X \cdot j \cdot m \cdot (U \cdot l + V \cdot k)\right]} = 0$$

4RST6AB2R9



$N_1 = 1.59556$ $N_4 = 0.26129$
$N_2 = 0.63667$ $N_5 = 2.09213$
$N_3 = 1.00946$ $N_6 = 1.29895$
$R = 0.36947$

Unit. $AB := 1$ **Given.** $N_1 := 1.59556$ $N_2 := .63667$ $N_3 := 1.00946$ $N_4 := .26129$ $N_5 := 2.09213$ $N_6 := 1.29895$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

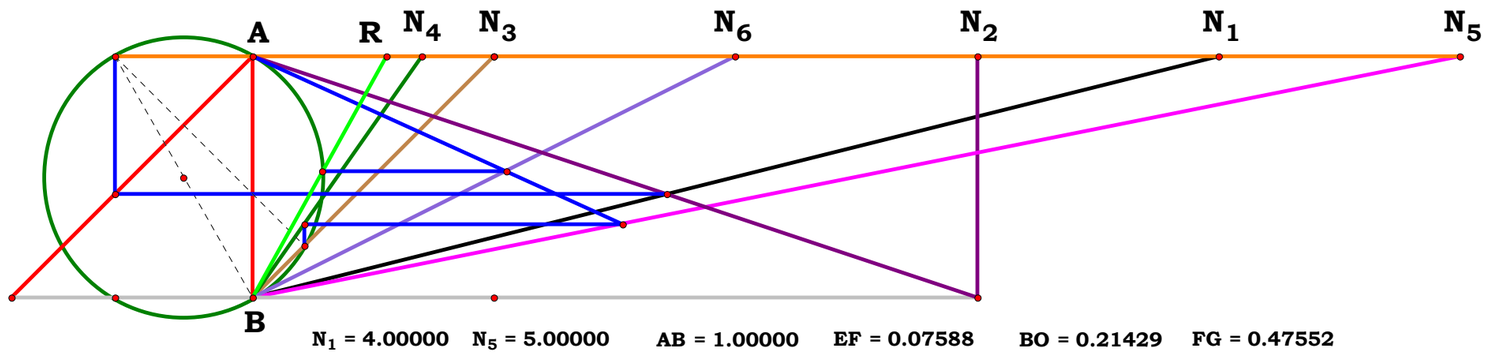
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.369478$$

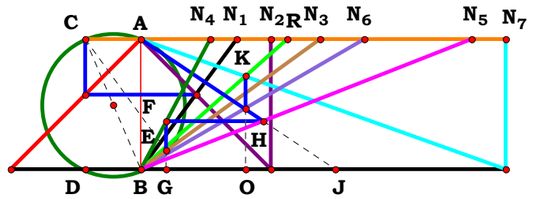


$N_1 = 4.00000$ $N_5 = 5.00000$ $AB = 1.00000$ $EF = 0.07588$ $BO = 0.21429$ $FG = 0.47552$
$N_2 = 3.00000$ $N_6 = 2.00000$ $AC = 0.57143$ $BN_3 = 1.41421$ $JO = 0.30612$ $EG = 0.55140$
$N_3 = 1.00000$ $R = 0.55225$ $EH = 1.15175$ $CN_3 = 1.57143$ $BP = 1.53061$ $GM = 0.57536$
$N_4 = 0.70000$ $AF = 0.28571$ $KN_3 = 1.11117$ $BQ = 2.20588$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\left[\begin{array}{l} \left(N_3 \cdot N_5 - N_3 \cdot N_6 + N_4 \cdot N_6 + N_3^2 \cdot N_4 \cdot N_6\right) \cdot \left(N_1 + N_2\right) \cdot N_1 - \left(N_5 - N_6\right) \cdot N_1^2 \cdot N_3^2 \ \ldots \\ + \ - \sqrt{N_1^2 \cdot N_6^2 \cdot \left[N_3^2 \cdot \left(N_1 + N_1 \cdot N_4 + N_2 \cdot N_4\right) - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right]^2 + N_1^2 \cdot N_3^2 \cdot N_5^2 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right)^2} \ \ldots \\ \quad + \ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2\right) \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right) \cdot \left[N_3^2 \cdot \left(N_1 + N_1 \cdot N_4 + N_2 \cdot N_4\right) - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right] \end{array}\right] \cdot \left(N_1 + N_2\right)^2}{2 \cdot N_3 \cdot N_5 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right) \cdot \left(N_1 + N_2\right)^3} = 0$$

4RST6AB3R10



$N_1 = 0.73353$ $N_4 = 0.53249$ $N_7 = 2.79739$
$N_2 = 0.99504$ $N_5 = 2.53768$ $R = 1.11879$
$N_3 = 1.37752$ $N_6 = 1.71544$

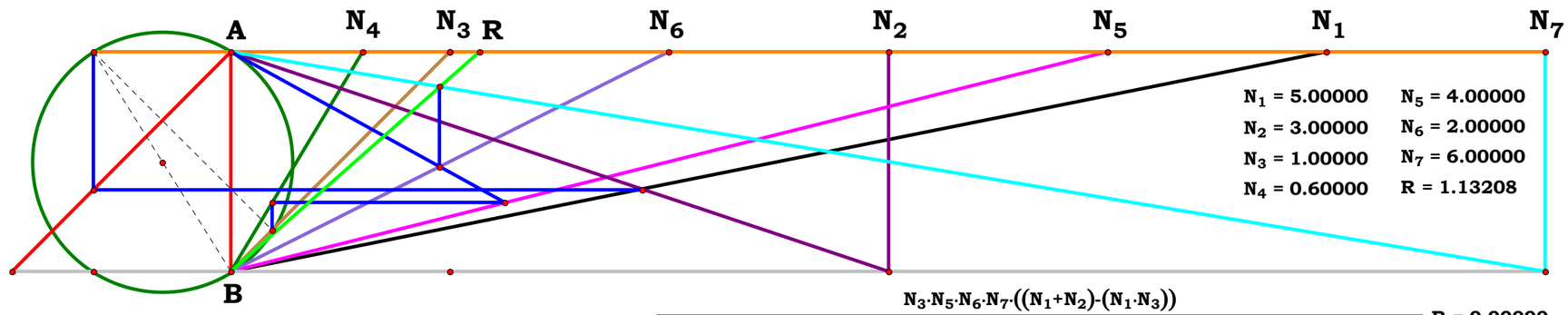
Unit. $AB := 1$ Given. $N_1 := .73353$ $N_2 := .99504$ $N_3 := 1.37752$ $N_4 := .53249$

$N_5 := 2.53768$ $N_6 := 1.71544$ $N_7 := 2.79739$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$



$N_1 = 5.00000$ $N_5 = 4.00000$
$N_2 = 3.00000$ $N_6 = 2.00000$
$N_3 = 1.00000$ $N_7 = 6.00000$
$N_4 = 0.60000$ $R = 1.13208$

$$\frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot ((N_1+N_2)-(N_1 \cdot N_3))}{N_6 \cdot N_7 \cdot (N_3{}^2 \cdot (N_1+N_1 \cdot N_4+N_2 \cdot N_4)-(N_3-N_4) \cdot (N_1+N_2))-N_3 \cdot N_5 \cdot (N_6-N_7) \cdot ((N_1+N_2)-(N_1 \cdot N_3))} - R = 0.00000$$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3{}^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$FH := N_5 \cdot FG$ $BJ := \frac{FH}{(AB - FG)}$

$BO := \frac{N_6 \cdot BJ}{N_6 + BJ}$ $KO := \frac{N_7 - BO}{N_7}$

$R := \frac{BO}{KO}$ $R = 1.118775$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_1 + N_2 - N_1 \cdot N_3)}{N_6 \cdot N_7 \cdot [N_3{}^2 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4) - (N_3 - N_4) \cdot (N_1 + N_2)] - N_3 \cdot N_5 \cdot (N_6 - N_7) \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

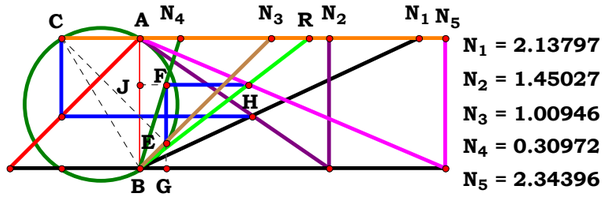
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{D \cdot N_u \cdot [C \cdot (A + B) - B \cdot N_u]}{N_u{}^2 \cdot E \cdot (A + B) + N_u \cdot B \cdot D \cdot (E - F + G) + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (T \cdot k \cdot l - T \cdot V \cdot k + U \cdot j \cdot l)}{W \cdot Y \cdot Z \cdot n \cdot (V^2 + l^2) \cdot (T \cdot k + U \cdot j) + V \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n) \cdot (T \cdot V \cdot k - T \cdot k \cdot l - U \cdot j \cdot l)} = 0$$

4RST6AB3R11



$N_1 = 2.13797$
$N_2 = 1.45027$
$N_3 = 1.00946$
$N_4 = 0.30972$
$N_5 = 2.34396$
$R = 1.29931$

Unit. $AB := 1$ **Given.** $N_1 := 2.13797$ $N_2 := 1.45027$ $N_3 := 1.00946$ $N_4 := .30972$ $N_5 := 2.34396$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

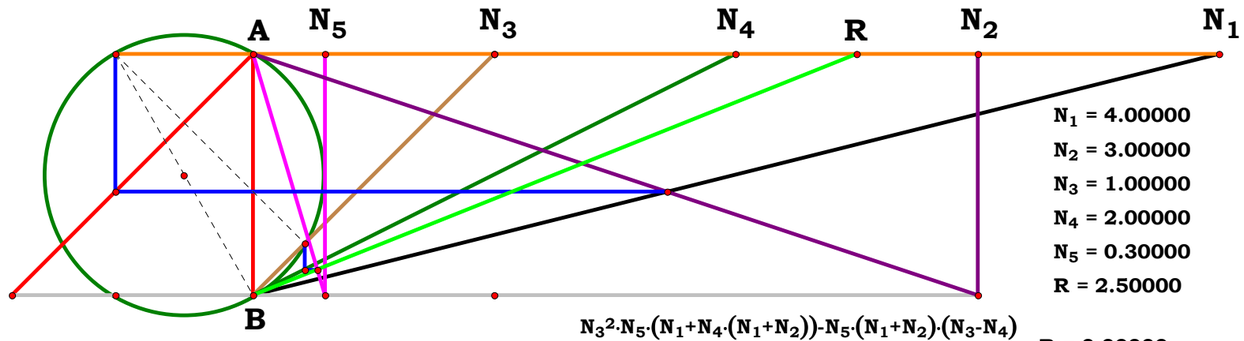
$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$HJ := N_5 \cdot (AB - FG)$ $R := \frac{HJ}{FG}$ $R = 1.299387$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 2.00000$
$N_5 = 0.30000$
$R = 2.50000$

$\frac{N_3^2 \cdot N_5 \cdot (N_1 + N_4 \cdot (N_1 + N_2)) - N_5 \cdot (N_1 + N_2) \cdot (N_3 - N_4)}{N_3 \cdot ((N_1 + N_2) - (N_1 \cdot N_3))} - R = 0.00000$

Definitions.

$$R - \frac{N_3^2 \cdot N_5 \cdot \left[N_1 + N_4 \cdot (N_1 + N_2)\right] - N_5 \cdot (N_3 - N_4) \cdot (N_1 + N_2)}{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

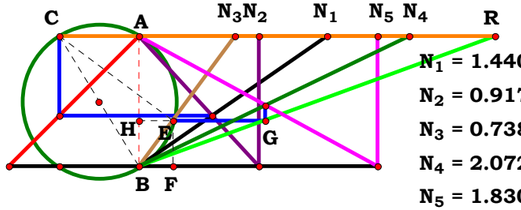
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A + B) \cdot N_u^3 + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C - D) \cdot (A + B)}{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n)}{X \cdot o \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n)} = 0$$

4RST6AB3R12



$N_1 = 1.44059$
$N_2 = 0.91756$
$N_3 = 0.73826$
$N_4 = 2.07253$
$N_5 = 1.83061$
$R = 2.73555$

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := .91756$ $N_3 := .73826$

$N_4 := 2.07253$ $N_5 := 1.83061$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

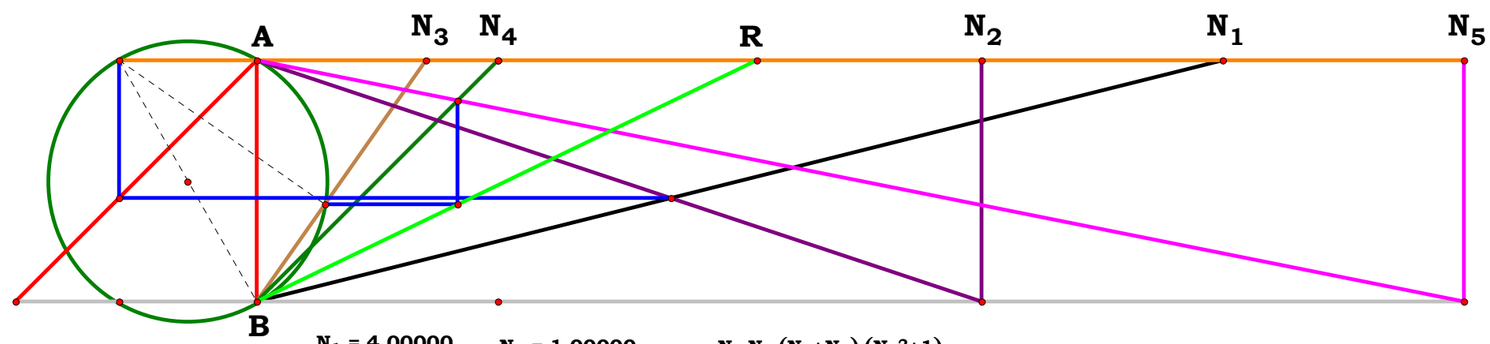
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 2.735571$



$N_1 = 4.00000$ $N_4 = 1.00000$ $\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot ((N_1 + N_2) - N_1 \cdot N_3)} - R = 0.00000$

$N_2 = 3.00000$ $N_5 = 5.00000$

$N_3 = 0.70000$ $R = 2.06944$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

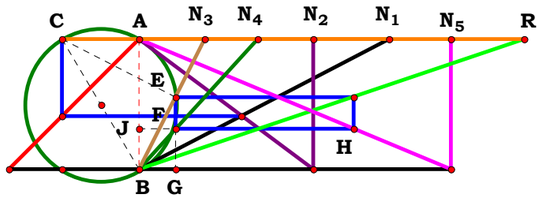
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{C \cdot (D + E) \cdot [C \cdot (A + B) - B \cdot N_u]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{n \cdot (Y \cdot p + Z \cdot o) \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n)} = 0$$

4RST6AB3R13



$N_1 = 1.91519$
$N_2 = 1.33405$
$N_3 = 0.50580$
$N_4 = 0.91023$
$N_5 = 2.39239$
$R = 2.95122$

Unit. $AB := 1$ **Given.** $N_1 := 1.91519$ $N_2 := 1.33405$ $N_3 := .50580$

$N_4 := .91023$ $N_5 := 2.39239$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

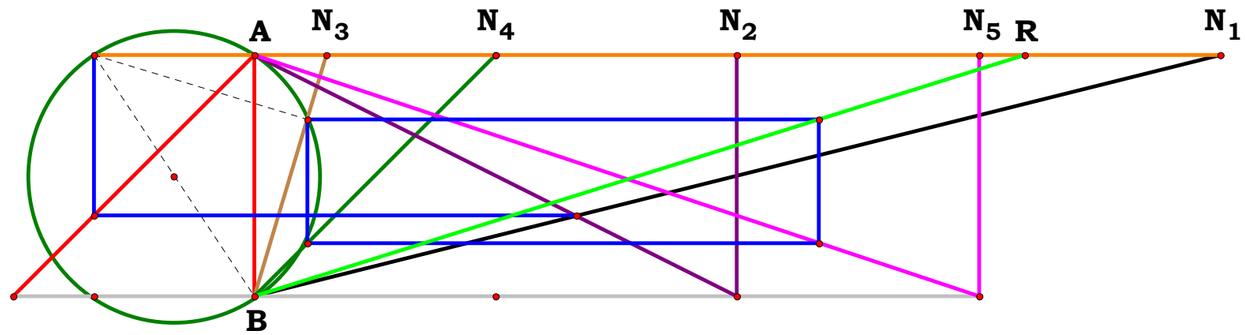
$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$ $EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 2.951229$



$N_1 = 4.00000$ $N_4 = 1.00000$

$N_2 = 2.00000$ $N_5 = 3.00000$

$N_3 = 0.30000$ $R = 3.18750$

$$\frac{N_5 \cdot (N_3^2 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4) - (N_3 - N_4) \cdot (N_1 + N_2))}{N_4 \cdot ((N_1 + N_2) - (N_1 \cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{N_5 \cdot \left[N_3^2 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4) - (N_3 - N_4) \cdot (N_1 + N_2)\right]}{N_4 \cdot (N_1 + N_2 - N_1 \cdot N_3)} = 0$$

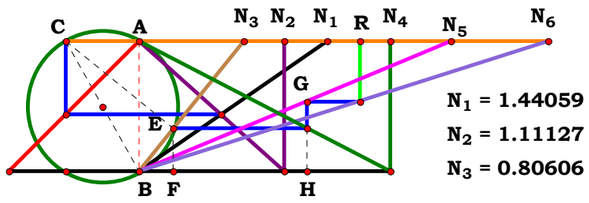
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{(A + B) \cdot N_u^3 + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C - D) \cdot (A + B)}{C \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - V \cdot m \cdot n - W \cdot l \cdot n)}{Y \cdot n \cdot p \cdot (V \cdot m \cdot n - V \cdot X \cdot m + W \cdot l \cdot n)} = 0$$

4RST6AB3R14



$N_1 = 1.44059$ $N_2 = 1.11127$ $N_3 = 0.80606$ $N_4 = 1.92724$ $N_5 = 2.39239$ $N_6 = 3.13925$ $R = 1.69351$

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := 1.11127$ $N_3 := .80606$ $N_4 := 1.92724$ $N_5 := 2.39239$ $N_6 := 3.13925$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

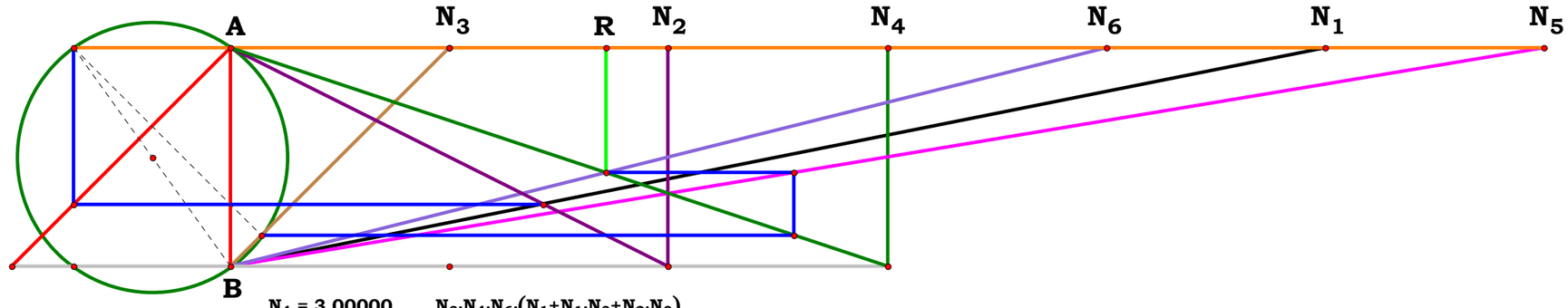
$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - EF)$

$GH := \frac{BH}{N_5}$ $R := N_6 \cdot GH$

$R = 1.693517$



$N_1 = 5.00000$ $N_2 = 2.00000$ $N_3 = 1.00000$ $N_4 = 3.00000$ $N_5 = 6.00000$ $N_6 = 4.00000$ $R = 1.71429$

$\frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)}{N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)} = 0$$

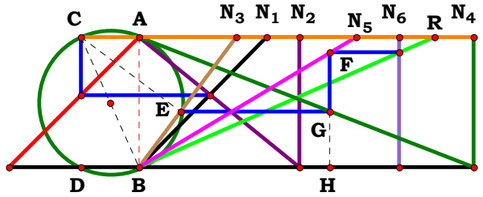
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)]}{D \cdot F \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (U \cdot W \cdot l + V \cdot W \cdot k + U \cdot l \cdot m)}{Y \cdot n \cdot p \cdot (U \cdot l + V \cdot k) \cdot (W^2 + m^2)} = 0$$

4RST6AB3R15



$N_1 = 0.97567$ $N_4 = 2.56650$
$N_2 = 1.22750$ $N_5 = 1.66595$
$N_3 = 0.74794$ $N_6 = 1.99633$
$R = 2.26889$

Unit. $AB := 1$ **Given.** $N_1 := .97567$ $N_2 := 1.22750$ $N_3 := .74794$

$N_4 := 2.56650$ $N_5 := 1.66595$ $N_6 := 1.99633$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

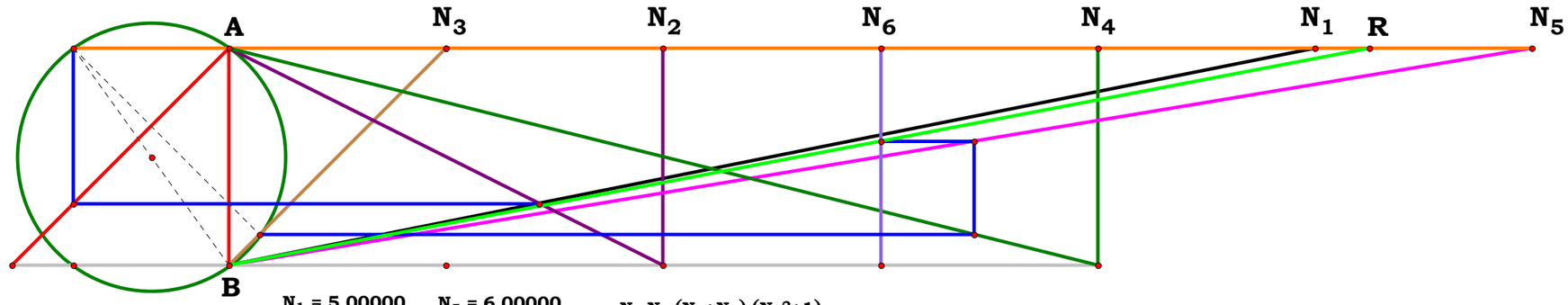
$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$GH := \frac{BN_3 - EN_3}{BN_3}$

$BH := N_4 \cdot (AB - GH)$ $FH := \frac{BH}{N_5}$

$R := \frac{N_6}{FH}$ $R = 2.268889$



$N_1 = 5.00000$ $N_5 = 6.00000$
$N_2 = 2.00000$ $N_6 = 3.00000$
$N_3 = 1.00000$ $R = 5.25000$
$N_4 = 4.00000$

$\frac{N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)} - R = 0.00000$

Definitions.

$R - \frac{N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_3 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$

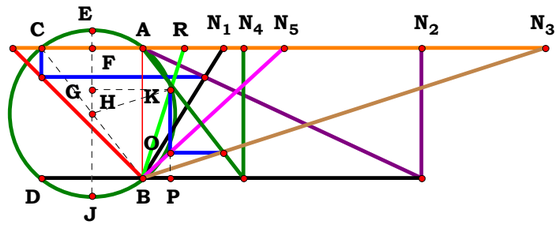
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$R - \frac{D \cdot (C^2 + N_u^2) \cdot (A + B)}{E \cdot F \cdot [B \cdot C + N_u \cdot (A + B)]} = 0$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$R - \frac{Y \cdot Z \cdot n \cdot (U \cdot l + V \cdot k) \cdot (W^2 + m^2)}{W \cdot X \cdot o \cdot p \cdot (U \cdot W \cdot l + V \cdot W \cdot k + U \cdot l \cdot m)} = 0$

4RST6AB4R0



$N_1 = 0.61730$
$N_2 = 2.13797$
$N_3 = 3.09190$
$N_4 = 0.77463$
$N_5 = 1.08481$
$R = 0.31740$

Unit. $AB := 1$ **Given.** $N_1 := .61730$ $N_2 := 2.13797$ $N_3 := 3.09190$ $N_4 := .77463$ $N_5 := 1.08481$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

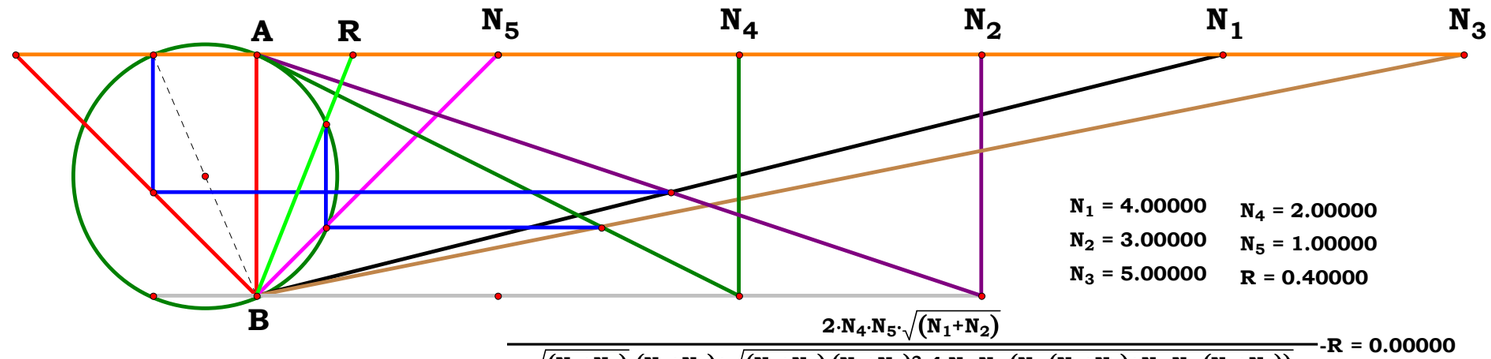
$EF := \frac{EJ - AB}{2}$ $AF := \frac{AC}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := BP + AF$ $HK := \frac{EJ}{2}$

$GH := \sqrt{HK^2 - GK^2}$ $KO := \frac{AB}{2} + GH$

$R := \frac{BP}{KO}$ $R = 0.317401$



$N_1 = 4.00000$ $N_4 = 2.00000$
$N_2 = 3.00000$ $N_5 = 1.00000$
$N_3 = 5.00000$ $R = 0.40000$

$$\frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{(N_1+N_2)}}{\sqrt{(N_1+N_2)} \cdot (N_3+N_4) + \sqrt{(N_1+N_2) \cdot (N_3+N_4)^2 - 4 \cdot N_4 \cdot N_5 \cdot (N_2 \cdot (N_3+N_4) + N_4 \cdot N_5 \cdot (N_1+N_2))}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_4 \cdot N_5 \cdot \sqrt{N_1 + N_2}}{\sqrt{N_1 + N_2} \cdot (N_3 + N_4) + \sqrt{(N_1 + N_2) \cdot (N_3 + N_4)^2 - 4 \cdot N_4 \cdot N_5 \cdot [N_2 \cdot (N_3 + N_4) + N_4 \cdot N_5 \cdot (N_1 + N_2)]}} = 0$$

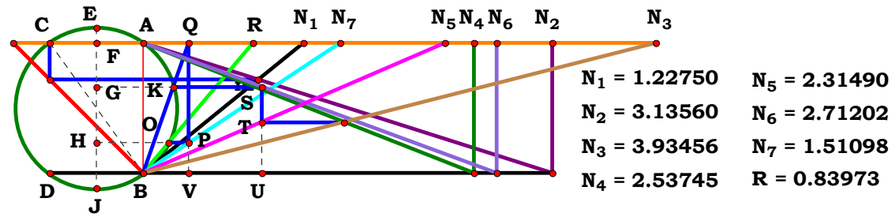
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot [E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot [A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)]]} + \sqrt{N_u \cdot (A+B)} \cdot E \cdot (C+D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot n \cdot \sqrt{V \cdot m + W \cdot l}}{\sqrt{p^2 \cdot (X \cdot o + Y \cdot n)^2 \cdot (V \cdot m + W \cdot l) - 4 \cdot Z^2 \cdot Y^2 \cdot n^2 \cdot (V \cdot m + W \cdot l) - 4 \cdot Z \cdot W \cdot Y \cdot l \cdot n \cdot p \cdot (X \cdot o + Y \cdot n)} + \sqrt{V \cdot m + W \cdot l} \cdot p \cdot (X \cdot o + Y \cdot n)} = 0$$

4RST6AB4R1



$N_1 = 1.22750$ $N_5 = 2.31490$
$N_2 = 3.13560$ $N_6 = 2.71202$
$N_3 = 3.93456$ $N_7 = 1.51098$
$N_4 = 2.53745$ $R = 0.83973$

Unit. $AB := 1$ **Given.** $N_1 := 1.22750$ $N_2 := 3.13560$ $N_3 := 3.93456$
$N_4 := 2.53745$ $N_5 := 2.31490$ $N_6 := 2.71202$ $N_7 := 1.51098$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

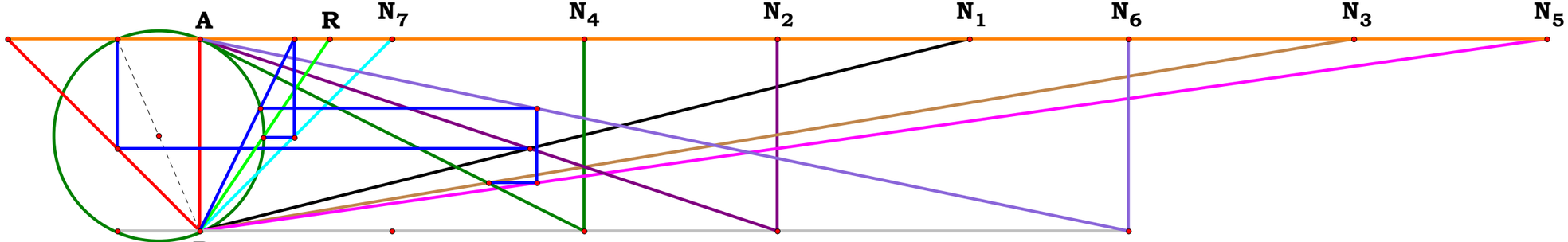
$$GJ := SU + EF$$

$$GK := \sqrt{GJ \cdot (EJ - GJ)} \qquad AQ := \frac{GK - AF}{SU}$$

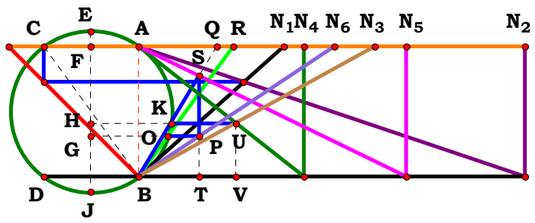
$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.83973$



$N_1 = 4.00000$ $N_5 = 7.00000$ $AB = 1.00000$ $EF = 0.04398$ $GJ = 0.68157$ $HJ = 0.53335$
$N_2 = 3.00000$ $N_6 = 4.82872$ $AC = 0.42857$ $TU = 0.25000$ $GK = 0.52630$ $HO = 0.54388$
$N_3 = 6.00000$ $N_7 = 1.00000$ $EJ = 1.08797$ $BU = 1.75000$ $AQ = 0.48936$ $R - \frac{HO-AF}{PV} = 0.00000$
$N_4 = 2.00000$ $R = 0.67351$ $AF = 0.21429$ $SU = 0.63759$ $PV = 0.48936$



$N_1 = 1.11127$ $N_5 = 2.05339$
$N_2 = 2.96126$ $N_6 = 1.50130$
$N_3 = 1.81338$ $R = 0.72418$
$N_4 = 1.26861$

Unit. $AB := 1$ **Given.** $N_1 := 1.11127$ $N_2 := 2.96126$ $N_3 := 1.81338$
$N_4 := 1.26961$ $N_5 := 2.05339$ $N_6 := 1.50130$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

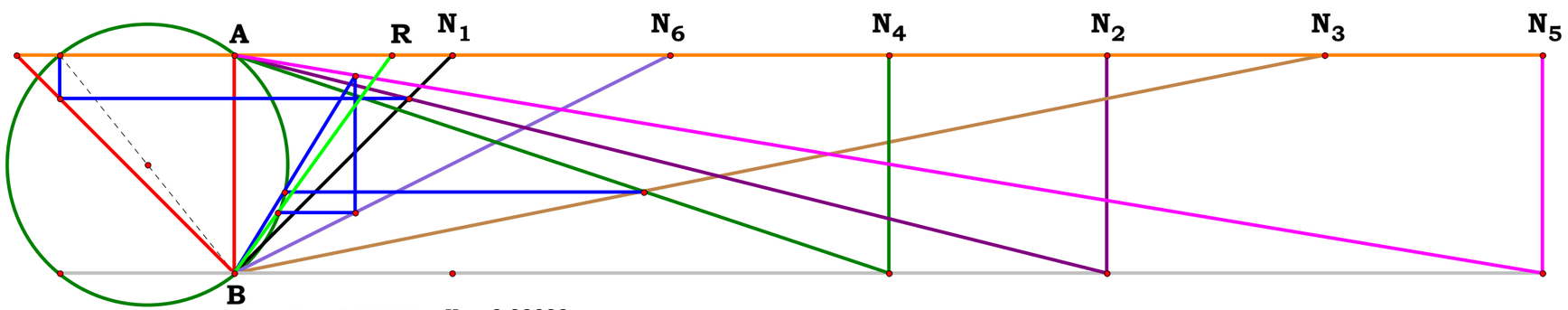
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

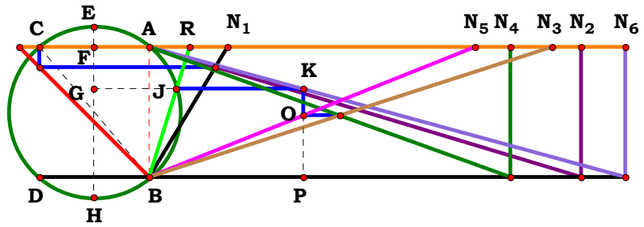
$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.724289$$



$N_1 = 1.00000$ $N_4 = 3.00000$ $AB = 1.00000$ $EF = 0.14031$ $AQ = 0.60798$ $GO = 0.59986$
$N_2 = 4.00000$ $N_5 = 6.00000$ $AC = 0.80000$ $UV = 0.37500$ $BT = 0.55204$
$N_3 = 5.00000$ $N_6 = 2.00000$ $EJ = 1.28062$ $HJ = 0.51531$ $PT = 0.27602$ $R - \frac{GO-AF}{PT} = 0.00000$
$R = 0.72408$ $AF = 0.40000$ $HK = 0.62799$ $GJ = 0.41633$

4RST6AB4R3



$N_1 = 0.59793$
$N_2 = 3.30995$
$N_3 = 3.09190$
$N_4 = 2.76991$
$N_5 = 2.49893$
$N_6 = 3.65154$
$R = 0.30667$

Unit. $AB := 1$ Given. $N_1 := .59793$ $N_2 := 3.30995$ $N_3 := 3.09190$

$N_4 := 2.76991$ $N_5 := 2.49893$ $N_6 := 3.65154$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$ $AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

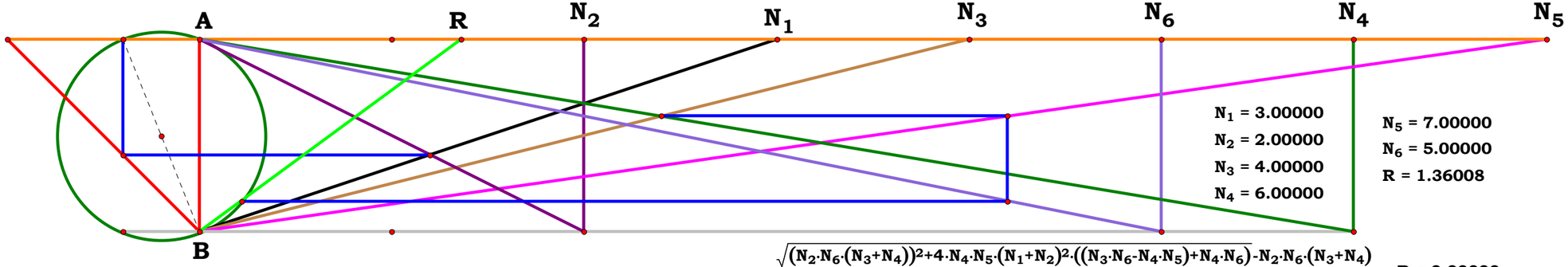
$BP := N_5 \cdot OP$ $KP := AB - \frac{BP}{N_6}$

$GH := KP + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GJ - AF}{KP}$

$R = 0.306668$



$\frac{\sqrt{(N_2 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

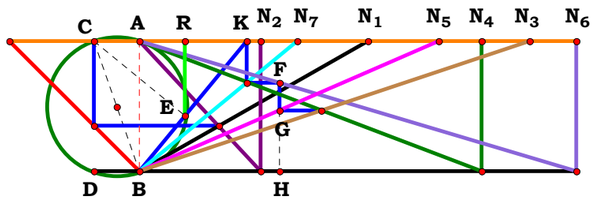
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{A^2 \cdot E^2 \cdot (C + D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E - F)] \cdot (A + B)^2} - A \cdot E \cdot (C + D)}{2 \cdot (A + B) \cdot [C \cdot (E - F) + D \cdot E]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot X \cdot Y \cdot m \cdot p \cdot (U \cdot l + V \cdot k)^2 \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o) + V^2 \cdot Z^2 \cdot k^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2} - V \cdot Z \cdot k \cdot o \cdot (W \cdot n + X \cdot m)}{(2 \cdot U \cdot l + 2 \cdot V \cdot k) \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

4RST6AB4R4



$N_1 = 1.75053$ $N_3 = 2.99504$ $N_5 = 2.29553$ $N_7 = 1.21072$

$N_2 = 0.92724$ $N_4 = 2.62462$ $N_6 = 3.35128$ $R = 0.35080$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 2.99504$ $N_4 := 2.62462$

$N_5 := 2.29553$ $N_6 := 3.35128$ $N_7 := 1.21072$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $GH := \frac{N_4}{N_3 + N_4}$ $BH := N_5 \cdot GH$

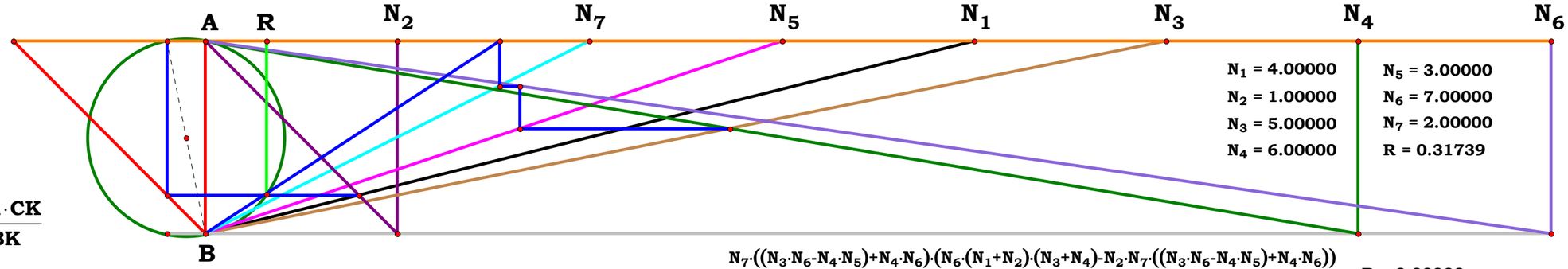
$FH := \frac{N_6 - BH}{N_6}$

$AK := N_7 \cdot FH$

$BK := \sqrt{AK^2 + AB^2}$

$CK := AK + AC$ $EK := \frac{AK \cdot CK}{BK}$

$R := AK \cdot \frac{(BK - EK)}{BK}$ $R = 0.350796$



$N_1 = 4.00000$ $N_5 = 3.00000$

$N_2 = 1.00000$ $N_6 = 7.00000$

$N_3 = 5.00000$ $N_7 = 2.00000$

$N_4 = 6.00000$ $R = 0.31739$

$$\frac{N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) \cdot (N_6 \cdot (N_1 + N_2) \cdot (N_3 + N_4) - N_2 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6))}{(N_1 + N_2) \cdot (N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) \cdot [N_6 \cdot (N_3 + N_4) \cdot (N_1 + N_2) - N_2 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)]}{(N_1 + N_2) \cdot [N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2]} = 0$$

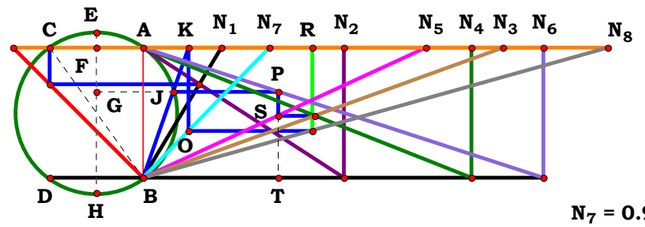
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{N_u \cdot (C \cdot E - C \cdot F + D \cdot E) \cdot [G \cdot E \cdot (C + D) \cdot (A + B) - A \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]]}{(A + B) \cdot [G^2 \cdot E^2 \cdot (C + D)^2 + N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2]} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot [Y \cdot n \cdot (V \cdot m + W \cdot l) \cdot (T \cdot k \cdot p - U \cdot Z \cdot j + U \cdot j \cdot p) + U \cdot W \cdot X \cdot Z \cdot j \cdot l \cdot o]}{(T \cdot k + U \cdot j) \cdot [Y^2 \cdot n^2 \cdot (Z^2 + p^2) \cdot (V \cdot m + W \cdot l)^2 - 2 \cdot Y \cdot W \cdot X \cdot Z^2 \cdot l \cdot n \cdot o \cdot (V \cdot m + W \cdot l) + W^2 \cdot X^2 \cdot Z^2 \cdot l^2 \cdot o^2]} = 0$$

4RST6AB4R5



$N_7 = 0.96858$
$N_8 = 3.56437$
$R = 1.29958$

Descriptions.

$N_1 = 0.59793$ $N_3 = 2.76258$ $N_5 = 2.16962$
$N_2 = 1.53745$ $N_4 = 2.51808$ $N_6 = 3.07039$

$$AC := \frac{N_2}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2} \qquad ST := \frac{N_4}{N_3 + N_4} \qquad BT := N_5 \cdot ST \qquad PT := \frac{N_6 - BT}{N_6}$$

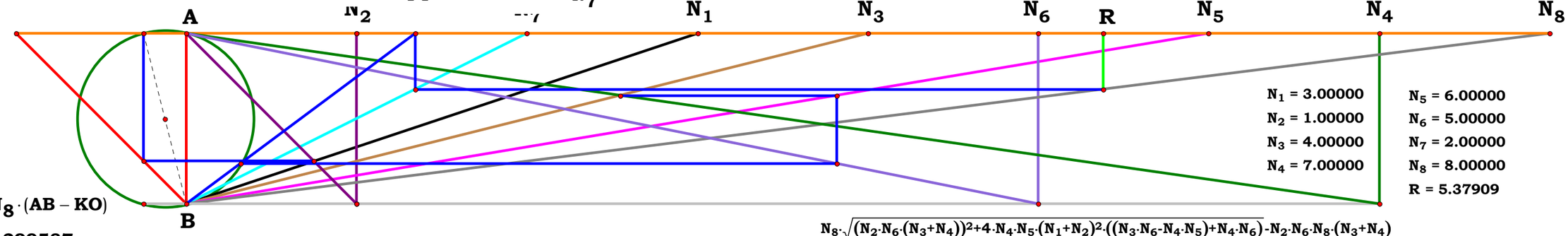
$$GH := PT + EF \qquad GJ := \sqrt{GH \cdot (EH - GH)} \qquad AK := \frac{(GJ - AF)}{PT} \qquad KO := \frac{N_7 - AK}{N_7}$$

Unit. $AB := 1$ **Given.** $N_1 := .59793$ $N_2 := 1.53745$ $N_3 := 2.76258$ $N_4 := 2.51808$
$N_5 := 2.16962$ $N_6 := 3.07039$ $N_7 := .96858$ $N_8 := 3.56437$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$$h := \frac{S}{N_1} \quad j := \frac{T}{N_2} \quad k := \frac{Y}{N_3} \quad l := \frac{V}{N_4} \quad m := \frac{W}{N_5} \quad n := \frac{X}{N_6} \quad o := \frac{Y}{N_7} \quad p := \frac{Z}{N_8}$$



$N_1 = 3.00000$ $N_5 = 6.00000$
$N_2 = 1.00000$ $N_6 = 5.00000$
$N_3 = 4.00000$ $N_7 = 2.00000$
$N_4 = 7.00000$ $N_8 = 8.00000$
$R = 5.37909$

$$R := N_8 \cdot (AB - KO)$$

$R = 1.299587$

$$\frac{N_8 \cdot \sqrt{(N_2 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot N_8 \cdot (N_3 + N_4)}{2 \cdot N_7 \cdot (N_1 + N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{N_8 \cdot \sqrt{N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_2 \cdot N_6 \cdot N_8 \cdot (N_3 + N_4)}{2 \cdot (N_1 + N_2) \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

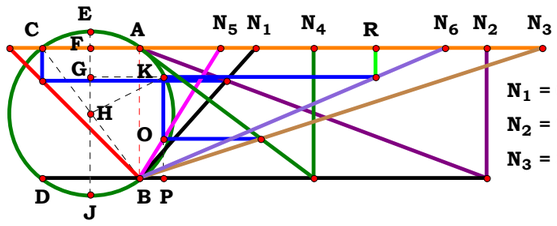
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0 \quad N_8 - \frac{N_u}{H} = 0$$

$$R - \frac{G \cdot \left[\sqrt{A^2 \cdot E^2 \cdot (C + D)^2 + 4 \cdot C \cdot F \cdot (A + B)^2 \cdot (C \cdot E - C \cdot F + D \cdot E)} - A \cdot E \cdot (C + D)\right]}{2 \cdot H \cdot (A + B) \cdot [C \cdot (E - F) + D \cdot E]} = 0$$

$$N_1 - \frac{S}{h} = 0 \quad N_2 - \frac{T}{j} = 0 \quad N_3 - \frac{U}{k} = 0 \quad N_4 - \frac{V}{l} = 0 \quad N_5 - \frac{W}{m} = 0 \quad N_6 - \frac{X}{n} = 0 \quad N_7 - \frac{Y}{o} = 0 \quad N_8 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot o \cdot \left[\sqrt{4 \cdot V \cdot W \cdot k \cdot n \cdot (T \cdot h + S \cdot j)^2 \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m) + T^2 \cdot X^2 \cdot h^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - T \cdot X \cdot h \cdot m \cdot (U \cdot l + V \cdot k)\right]}{2 \cdot Y \cdot p \cdot (T \cdot h + S \cdot j) \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} = 0$$

4RST6AB4R6



$N_1 = 0.88850$ $N_4 = 1.33641$
$N_2 = 2.66100$ $N_5 = 0.61989$
$N_3 = 3.09190$ $N_6 = 2.34396$
$R = 1.81285$

Unit. $AB := 1$ Given. $N_1 := .88850$ $N_2 := 2.66100$ $N_3 := 3.09190$

$N_4 := 1.33641$ $N_5 := .61989$ $N_6 := 2.34396$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

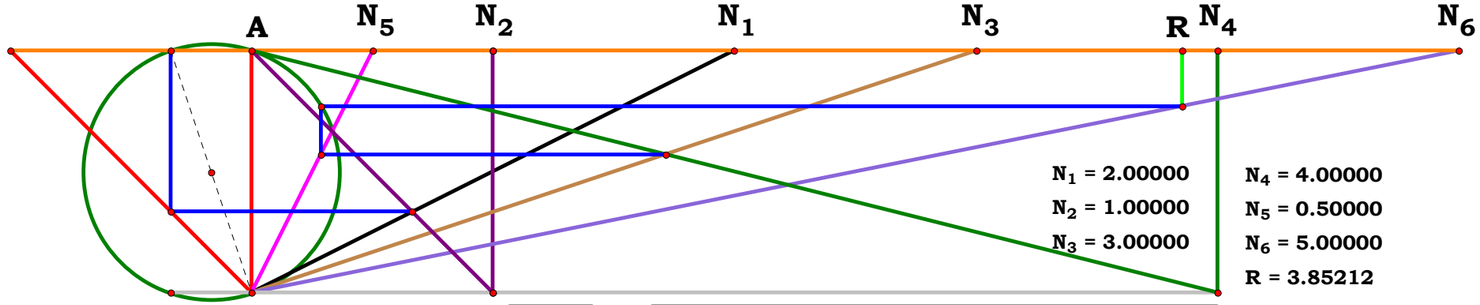
$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$

$GH := \sqrt{HK^2 - GK^2}$ $KP := GH + HK - EF$

$R := N_6 \cdot KP$ $R = 1.812854$



$N_1 = 2.00000$ $N_4 = 4.00000$
$N_2 = 1.00000$ $N_5 = 0.50000$
$N_3 = 3.00000$ $N_6 = 5.00000$
$R = 3.85212$

B $\frac{N_6 \cdot (N_3+N_4) \cdot \sqrt{(N_1+N_2)} + N_6 \cdot \sqrt{(N_1+N_2) \cdot (N_3+N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1+N_2) - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3+N_4)}}{2 \cdot (N_3+N_4) \cdot \sqrt{(N_1+N_2)}} - R = 0.00000$

Definitions.

$$R - \frac{N_6 \cdot \left[\sqrt{N_1 + N_2} \cdot (N_3 + N_4) + \sqrt{(N_1 + N_2) \cdot (N_3 + N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 + N_2) - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4)}\right]}{2 \cdot (N_3 + N_4) \cdot \sqrt{N_1 + N_2}} = 0$$

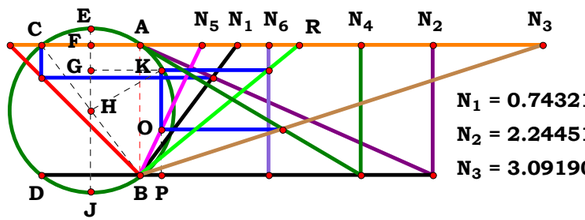
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{N_u \cdot \left[\sqrt{N_u \cdot \left[E \cdot (C + D) \cdot \left[E \cdot (C + D) \cdot (A + B) - 4 \cdot A \cdot C \cdot N_u\right] - 4 \cdot C^2 \cdot N_u^2 \cdot (A + B)\right]} + \sqrt{\left[N_u \cdot (A + B)\right]} \cdot E \cdot (C + D)\right]}{2 \cdot \sqrt{\left[N_u \cdot (A + B)\right]} \cdot F \cdot (C + D) \cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[\sqrt{o^2 \cdot (W \cdot n + X \cdot m)^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot Y^2 \cdot X^2 \cdot m^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot Y \cdot V \cdot X \cdot k \cdot m \cdot o \cdot (W \cdot n + X \cdot m)} + \sqrt{U \cdot l + V \cdot k} \cdot o \cdot (W \cdot n + X \cdot m)\right]}{2 \cdot p \cdot \sqrt{U \cdot l + V \cdot k} \cdot (W \cdot n + X \cdot m) \cdot o} = 0$$

4RST6AB4R7



$N_1 = 0.74321$ $N_2 = 2.24451$ $N_3 = 3.09190$ $N_4 = 1.69478$ $N_5 = 0.47460$ $N_6 = 0.98795$ $R = 1.22109$

Unit. $AB := 1$ Given. $N_1 := .74321$ $N_2 := 2.24451$ $N_3 := 3.09190$ $N_4 := 1.69478$ $N_5 := .47460$ $N_6 := .98795$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

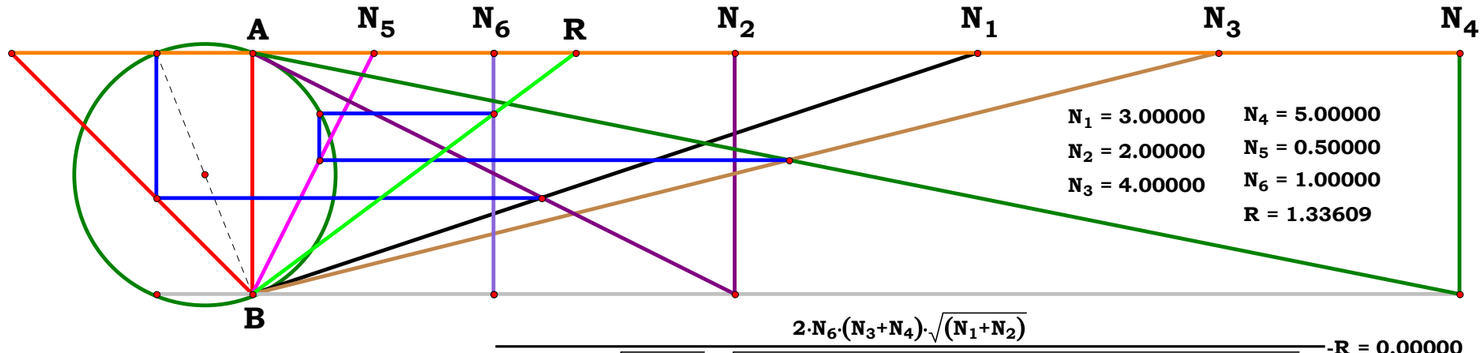
$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$

$GH := \sqrt{HK^2 - GK^2}$ $KP := GH + HK - EF$

$R := \frac{N_6}{KP}$ $R = 1.221089$



$N_1 = 3.00000$ $N_2 = 2.00000$ $N_3 = 4.00000$ $N_4 = 5.00000$ $N_5 = 0.50000$ $N_6 = 1.00000$ $R = 1.33609$

$$\frac{2 \cdot N_6 \cdot (N_3+N_4) \cdot \sqrt{(N_1+N_2)}}{(N_3+N_4) \cdot \sqrt{(N_1+N_2)} + \sqrt{(N_1+N_2) \cdot (N_3+N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1+N_2) - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3+N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_6 \cdot \sqrt{N_1 + N_2} \cdot (N_3 + N_4)}{\sqrt{N_1 + N_2} \cdot (N_3 + N_4) + \sqrt{(N_1 + N_2) \cdot (N_3 + N_4)^2 - 4 \cdot N_4^2 \cdot N_5^2 \cdot (N_1 + N_2) - 4 \cdot N_2 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4)}} = 0$$

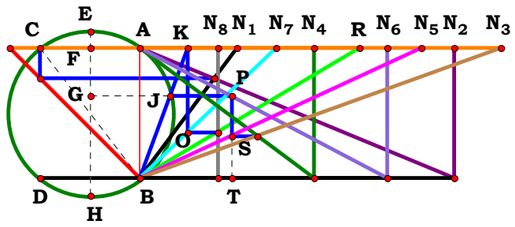
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \cdot E}{F \cdot \left[\sqrt{N_u \cdot \left[E \cdot (C+D) \cdot \left[E \cdot (A+B) \cdot (C+D) - 4 \cdot A \cdot C \cdot N_u\right] - 4 \cdot C^2 \cdot N_u^2 \cdot (A+B)\right]} + \sqrt{\left[N_u \cdot (A+B)\right] \cdot E \cdot (C+D)}\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Z \cdot \sqrt{U \cdot l + V \cdot k} \cdot (W \cdot n + X \cdot m) \cdot o}{p \cdot \left[\sqrt{o^2 \cdot (W \cdot n + X \cdot m)^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot Y^2 \cdot X^2 \cdot m^2 \cdot (U \cdot l + V \cdot k) - 4 \cdot Y \cdot V \cdot X \cdot k \cdot m \cdot o \cdot (W \cdot n + X \cdot m)} + \sqrt{U \cdot l + V \cdot k} \cdot o \cdot (W \cdot n + X \cdot m)\right]} = 0$$

4RST6AB4R8



$N_1 = 0.74321$ $N_3 = 2.77227$ $N_5 = 2.15993$
$N_2 = 2.41649$ $N_4 = 1.33641$ $N_6 = 1.89841$

$N_7 = 1.04606$
$N_8 = 0.59870$
$R = 1.68944$

Unit. $AB := 1$ **Given.** $N_1 := .74321$ $N_2 := 2.41649$ $N_3 := 2.77227$ $N_4 := 1.33641$
$N_5 := 2.15993$ $N_6 := 1.89841$ $N_7 := 1.04606$ $N_8 := .59870$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$ $PT := \frac{N_6 - BT}{N_6}$

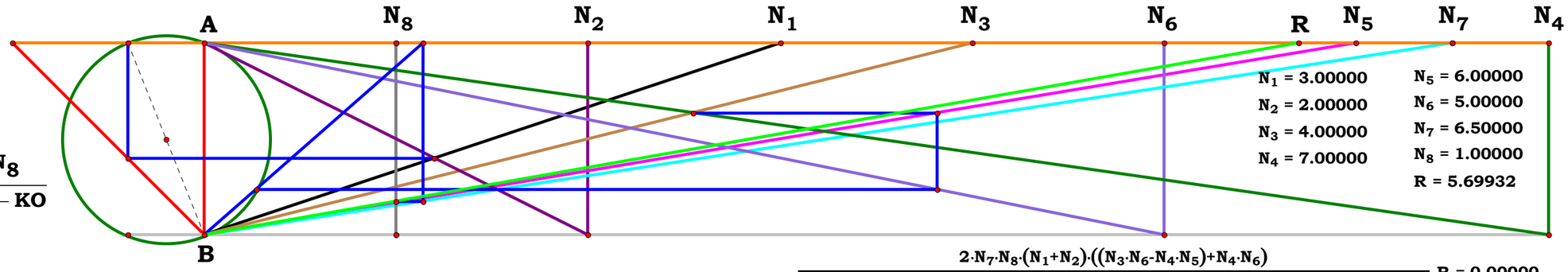
$GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$

$KO := \frac{N_7 - AK}{N_7}$ $R := \frac{N_8}{AB - KO}$

$R = 1.689429$



$N_1 = 3.00000$ $N_5 = 6.00000$
$N_2 = 2.00000$ $N_6 = 5.00000$
$N_3 = 4.00000$ $N_7 = 6.50000$
$N_4 = 7.00000$ $N_8 = 1.00000$
$R = 5.69932$

$$\frac{2 \cdot N_7 \cdot N_8 \cdot (N_1+N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{\sqrt{4 \cdot N_4 \cdot N_5 \cdot (N_1+N_2)^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) + (N_2 \cdot N_6 \cdot (N_3+N_4))^2} - N_2 \cdot N_6 \cdot (N_3+N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_7 \cdot N_8 \cdot (N_1 + N_2) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{\sqrt{4 \cdot N_4 \cdot N_5 \cdot (N_1 + N_2)^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) + N_2^2 \cdot N_6^2 \cdot (N_3 + N_4)^2} - N_2 \cdot N_6 \cdot (N_3 + N_4)} = 0$$

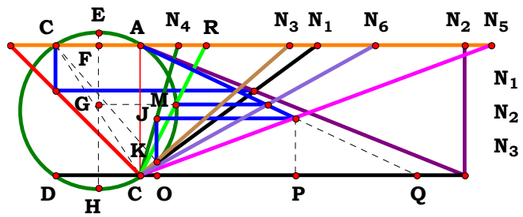
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot (A + B) \cdot [C \cdot (E - F) + D \cdot E]}{G \cdot H \cdot \left[\sqrt{4 \cdot C \cdot F \cdot (A + B)^2 \cdot [C \cdot (E - F) + D \cdot E] + A^2 \cdot E^2 \cdot (C + D)^2} - A \cdot E \cdot (C + D)\right]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot (T \cdot h + S \cdot j) \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{o \cdot p \cdot \left[\sqrt{4 \cdot V \cdot W \cdot k \cdot n \cdot (T \cdot h + S \cdot j)^2 \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m) + T^2 \cdot X^2 \cdot h^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - T \cdot X \cdot h \cdot m \cdot (U \cdot l + V \cdot k)\right]} = 0$$

4RST6AB4R9



$N_1 = 1.35342$
$N_2 = 2.48665$
$N_3 = 1.14506$
$N_4 = 0.29034$
$N_5 = 2.69265$
$N_6 = 1.80156$
$R = 0.49974$

Unit. $AB := 1$ **Given.** $N_1 := 1.35342$ $N_2 := 2.48665$ $N_3 := 1.14506$ $N_4 := .29034$ $N_5 := 2.69265$ $N_6 := 1.80156$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

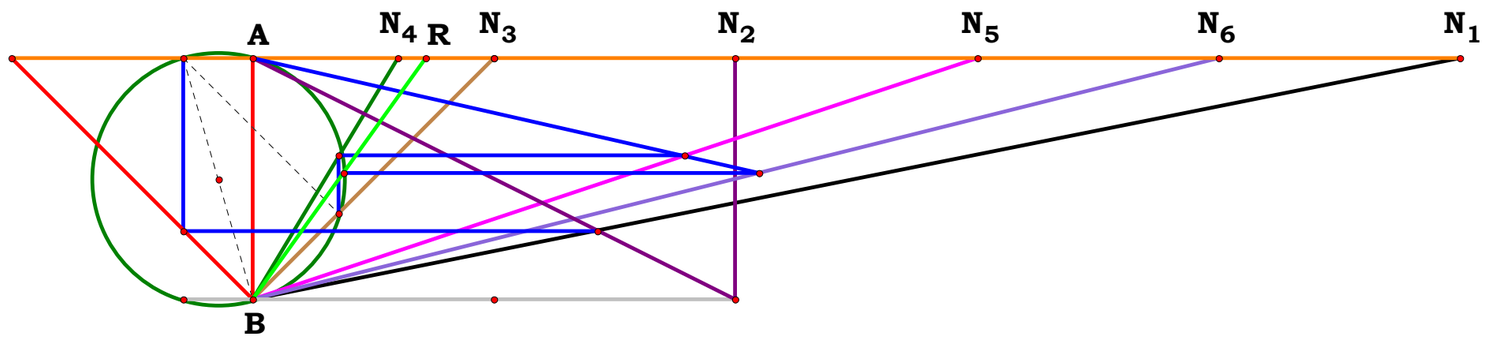
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.499729$$



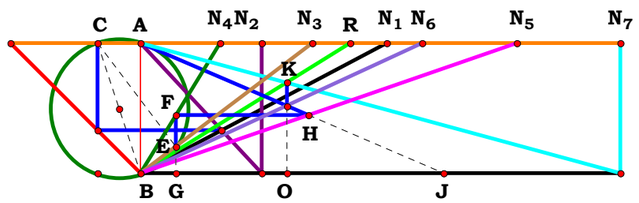
$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.60000$
$N_5 = 3.00000$
$N_6 = 4.00000$
$R = 0.71800$
$AB = 1.00000$
$AC = 0.28571$
$EH = 1.04002$
$AF = 0.14286$
$EF = 0.02001$
$BN_3 = 1.41421$
$CN_3 = 1.28571$
$KN_3 = 0.90914$
$BO = 0.35714$
$JO = 0.59524$
$BP = 1.78571$
$BQ = 4.41176$
$FG = 0.47552$
$EG = 0.49553$
$GM = 0.51943$
$R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\left(N_1 + N_2\right)^2 \cdot \sqrt{\begin{matrix} N_2^2 \cdot N_6^2 \cdot \left[N_3^2 \cdot \left[N_2 + N_4 \cdot \left(N_1 + N_2\right)\right] - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right]^2 + N_2^2 \cdot N_3^2 \cdot N_5^2 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right)^2 \ \ldots \\ + \ 2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2\right) \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) \cdot \left[N_3^2 \cdot \left[N_2 + N_4 \cdot \left(N_1 + N_2\right)\right] - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right] \end{matrix}} \ \ldots}{2 \cdot N_3 \cdot N_5 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) \cdot \left(N_1 + N_2\right)^3} = 0$$

$$+ \ -\sqrt{\left(N_1 + N_2\right)^4} \cdot N_2 \cdot \left[\left[N_3 \cdot \left(N_5 - N_6\right) + N_4 \cdot N_6 \cdot \left(N_3^2 + 1\right)\right] \cdot \left(N_1 + N_2\right) - \left(N_5 - N_6\right) \cdot N_2 \cdot N_3^2\right]$$

4RST6AB4R10



$N_1 = 1.88613$ $N_3 = 1.31940$ $N_5 = 2.88636$ $N_7 = 3.68060$

$N_2 = 0.92724$ $N_4 = 0.60998$ $N_6 = 2.15993$ $R = 1.60871$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := .92724$ $N_3 := 1.31940$ $N_4 := .60998$

$N_5 := 2.88636$ $N_6 := 2.15993$ $N_7 := 3.68060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

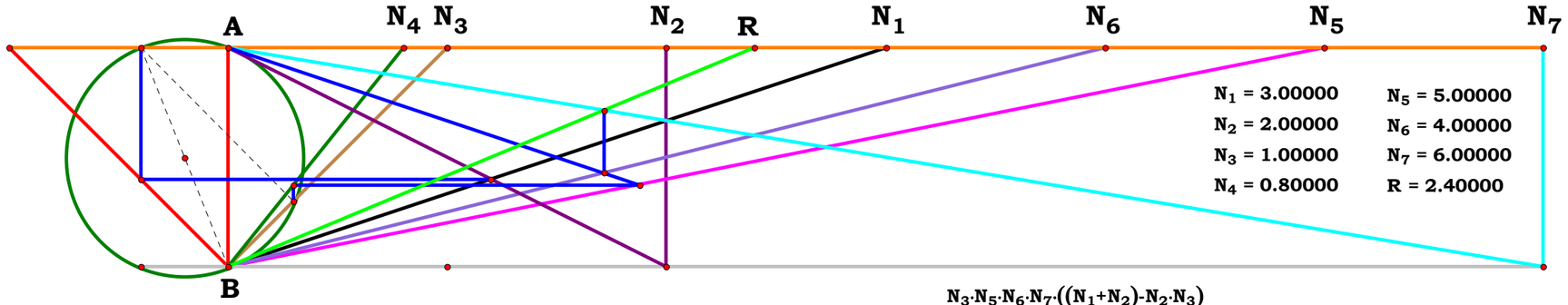
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$FH := N_5 \cdot FG$ $BJ := \frac{FH}{(AB - FG)}$

$BO := \frac{N_6 \cdot BJ}{N_6 + BJ}$ $KO := \frac{N_7 - BO}{N_7}$

$R := \frac{BO}{KO}$ $R = 1.608696$



$N_1 = 3.00000$ $N_5 = 5.00000$

$N_2 = 2.00000$ $N_6 = 4.00000$

$N_3 = 1.00000$ $N_7 = 6.00000$

$N_4 = 0.80000$ $R = 2.40000$

$$\frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot ((N_1 + N_2) - N_2 \cdot N_3)}{N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) \cdot (N_1 + N_2) - N_3 \cdot ((N_5 \cdot N_6 - N_5 \cdot N_7) + N_6 \cdot N_7) \cdot ((N_1 + N_2) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_1 + N_2 - N_2 \cdot N_3)}{N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) \cdot (N_1 + N_2) - N_3 \cdot (N_5 \cdot N_6 - N_5 \cdot N_7 + N_6 \cdot N_7) \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

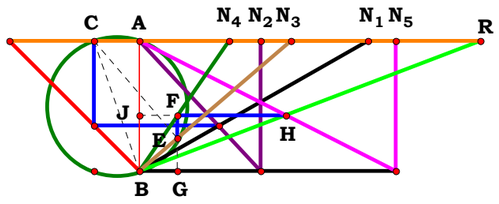
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{D \cdot N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\left[E \cdot (C^2 - D \cdot C + N_u^2) + C \cdot D \cdot F - C \cdot D \cdot G\right] \cdot (A + B) + A \cdot D \cdot N_u \cdot (E - F + G)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (T \cdot k \cdot l - U \cdot V \cdot j + U \cdot j \cdot l)}{W \cdot Y \cdot Z \cdot n \cdot (V^2 + l^2) \cdot (T \cdot k + U \cdot j) + V \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n) \cdot (U \cdot V \cdot j - T \cdot k \cdot l - U \cdot j \cdot l)} = 0$$

4RST6AB4R11



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.16443$
$N_4 = 0.68746$
$N_5 = 1.96621$
$R = 2.61627$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.16443$

$N_4 := .68746$ $N_5 := 1.96621$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

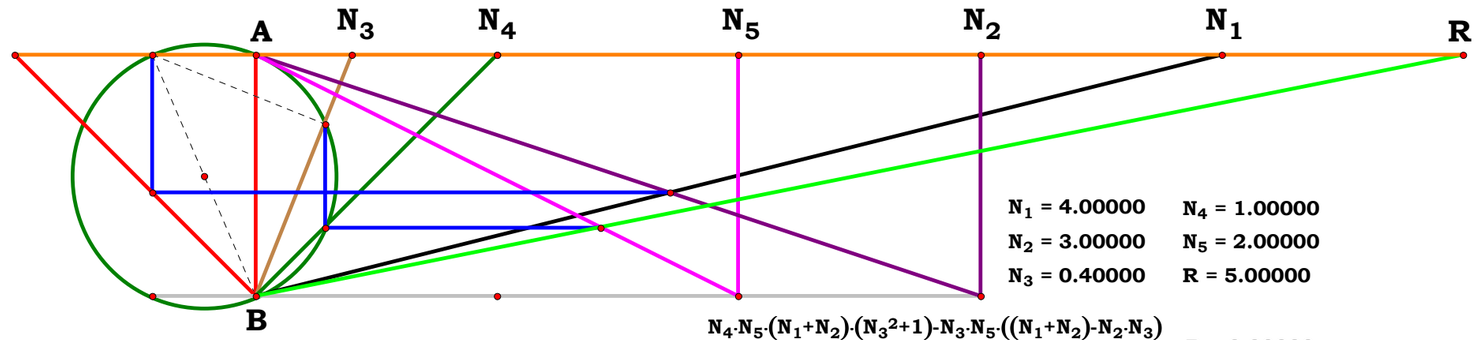
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$ $CN_3 := N_3 + AC$

$EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$ $BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$

$FG := \frac{BG}{N_4}$ $HJ := N_5 \cdot (AB - FG)$

$R := \frac{HJ}{FG}$ $R = 2.616258$



$N_1 = 4.00000$ $N_4 = 1.00000$
$N_2 = 3.00000$ $N_5 = 2.00000$
$N_3 = 0.40000$ $R = 5.00000$

$\frac{N_4 \cdot N_5 \cdot (N_1+N_2) \cdot (N_3^2+1) - N_3 \cdot N_5 \cdot ((N_1+N_2) - N_2 \cdot N_3)}{N_3 \cdot ((N_1+N_2) - N_2 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_4 \cdot N_5 \cdot (N_3^2 + 1) \cdot (N_1 + N_2) - N_3 \cdot N_5 \cdot (N_1 + N_2 - N_2 \cdot N_3)}{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

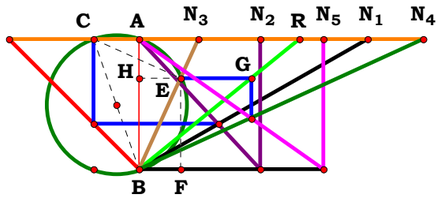
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot \left[C^2 \cdot (A + B) + N_u^2 \cdot (A + B) - C \cdot D \cdot (A + B) + A \cdot D \cdot N_u\right]}{D \cdot E \cdot (A \cdot C + B \cdot C - A \cdot N_u)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot \left[Y \cdot (X^2 + n^2) \cdot (V \cdot m + W \cdot l) + X \cdot o \cdot (W \cdot X \cdot l - V \cdot m \cdot n - W \cdot l \cdot n)\right]}{X \cdot o \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST6AB4R12



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 0.45737$
$N_4 = 2.17907$
$N_5 = 1.41412$
$R = 1.23212$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := .45737$

$N_4 := 2.17907$ $N_5 := 1.41412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 1.232118$

Definitions.

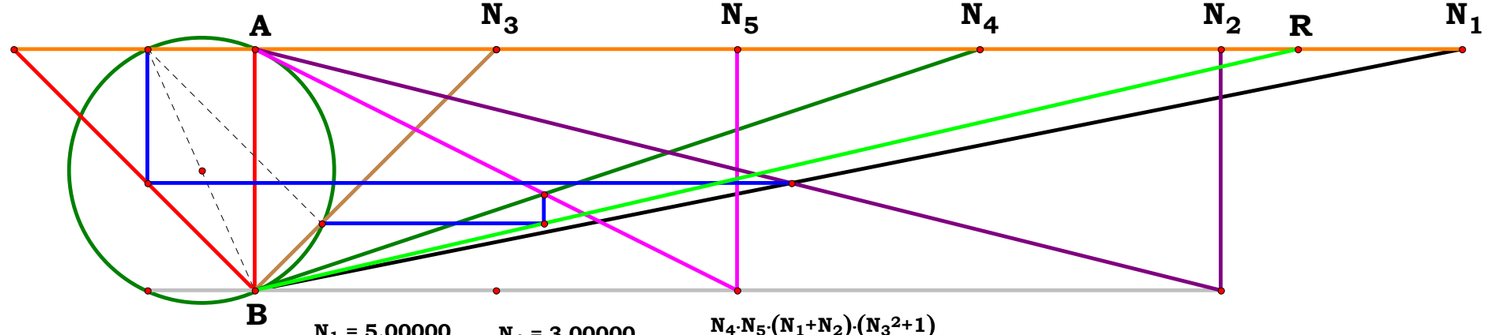
$$R - \frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot (C^2 + N_u^2) \cdot (A + B)}{C \cdot (D + E) \cdot [C \cdot (A + B) - A \cdot N_u]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot (V \cdot m + W \cdot l) \cdot (X^2 + n^2)}{n \cdot (Y \cdot p + Z \cdot o) \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

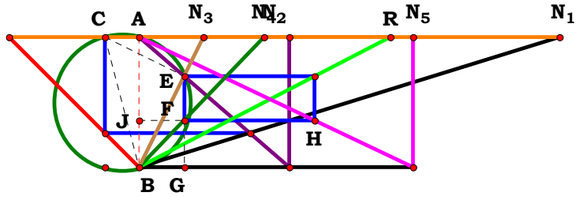


$N_1 = 5.00000$ $N_4 = 3.00000$ $\frac{N_4 \cdot N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot ((N_1 + N_2) - N_2 \cdot N_3)} - R = 0.00000$

$N_2 = 4.00000$ $N_5 = 2.00000$

$N_3 = 1.00000$ $R = 4.32000$

4RST6AB4R13



$N_1 = 3.22277$
$N_2 = 1.15002$
$N_3 = 0.49611$
$N_4 = 0.95866$
$N_5 = 2.10182$
$R = 1.92444$

Unit. $AB := 1$ **Given.** $N_1 := 3.22277$ $N_2 := 1.15002$ $N_3 := .49611$ $N_4 := .958666$ $N_5 := 2.10182$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

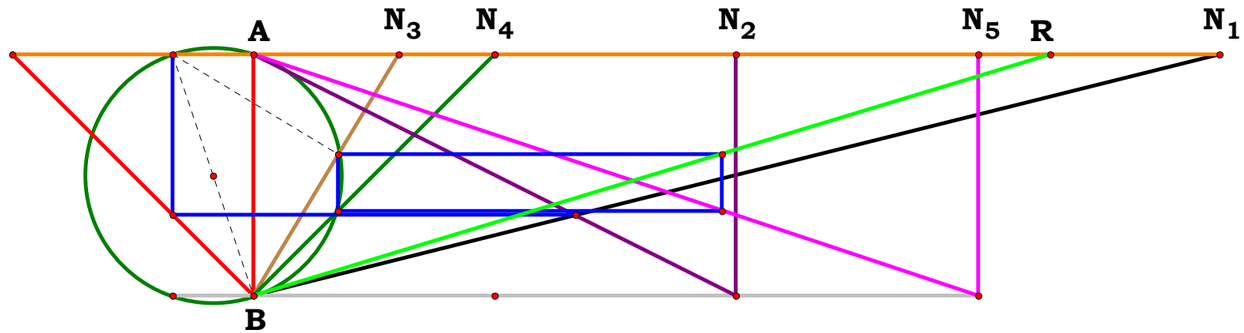
$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$ $EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 1.924444$



$N_1 = 4.00000$ $N_4 = 1.00000$
$N_2 = 2.00000$ $N_5 = 3.00000$
$N_3 = 0.60000$ $R = 3.30000$

$$\frac{N_2 \cdot N_3^2 \cdot N_5 + N_5 \cdot ((N_3^2 \cdot N_4 - N_3) + N_4) \cdot (N_1 + N_2)}{N_4 \cdot ((N_1 + N_2) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3^2 \cdot N_5 + N_5 \cdot (N_3^2 \cdot N_4 - N_3 + N_4) \cdot (N_1 + N_2)}{N_4 \cdot (N_1 + N_2 - N_2 \cdot N_3)} = 0$$

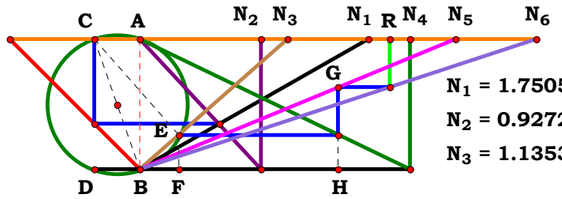
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left[\left(C^2 + N_u^2 \right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u \right] \right]}{C \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u \right]} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[Y \cdot \left(X^2 + n^2 \right) \cdot (V \cdot m + W \cdot l) + X \cdot o \cdot (W \cdot X \cdot l - V \cdot m \cdot n - W \cdot l \cdot n) \right]}{Y \cdot n \cdot p \cdot (V \cdot m \cdot n - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST6AB4R14



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.13537$
$N_4 = 2.07253$
$N_5 = 2.42145$
$N_6 = 3.04134$
$R = 1.91299$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$

$BH := N_4 \cdot (AB - EF)$ $GH := \frac{BH}{N_5}$

$R := N_6 \cdot GH$ $R = 1.912992$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot \left(N_2 + N_1 \cdot N_3 + N_2 \cdot N_3\right)}{N_5 \cdot \left(N_1 + N_2\right) \cdot \left(N_3^2 + 1\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot \left[A \cdot C + N_u \cdot (A + B)\right]}{D \cdot F \cdot \left(C^2 + N_u^2\right) \cdot (A + B)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (U \cdot W \cdot l + V \cdot W \cdot k + V \cdot k \cdot m)}{Y \cdot n \cdot p \cdot (U \cdot l + V \cdot k) \cdot \left(W^2 + m^2\right)} = 0$$

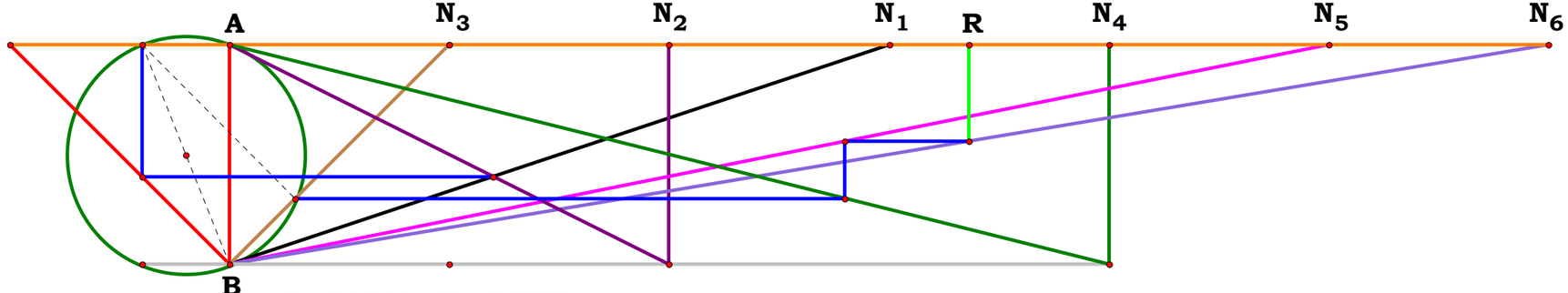
Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.13537$

$N_4 := 2.07253$ $N_5 := 2.42145$ $N_6 := 3.04134$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 3.00000$ $N_4 = 4.00000$

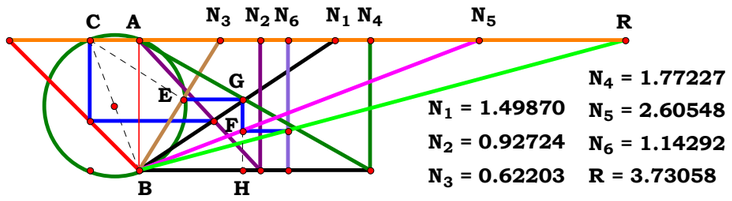
$N_2 = 2.00000$ $N_5 = 5.00000$

$N_3 = 1.00000$ $N_6 = 6.00000$

$R = 3.36000$

$$\frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}{N_5 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)} - R = 0.00000$$

4RST6AB4R15



$N_4 = 1.77227$
$N_1 = 1.49870$ $N_5 = 2.60548$
$N_2 = 0.92724$ $N_6 = 1.14292$
$N_3 = 0.62203$ $R = 3.73058$

Unit. $AB := 1$ **Given.** $N_1 := 1.49870$ $N_2 := .92724$ $N_3 := .62203$

$N_4 := 1.77227$ $N_5 := 2.60548$ $N_6 := 1.14292$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

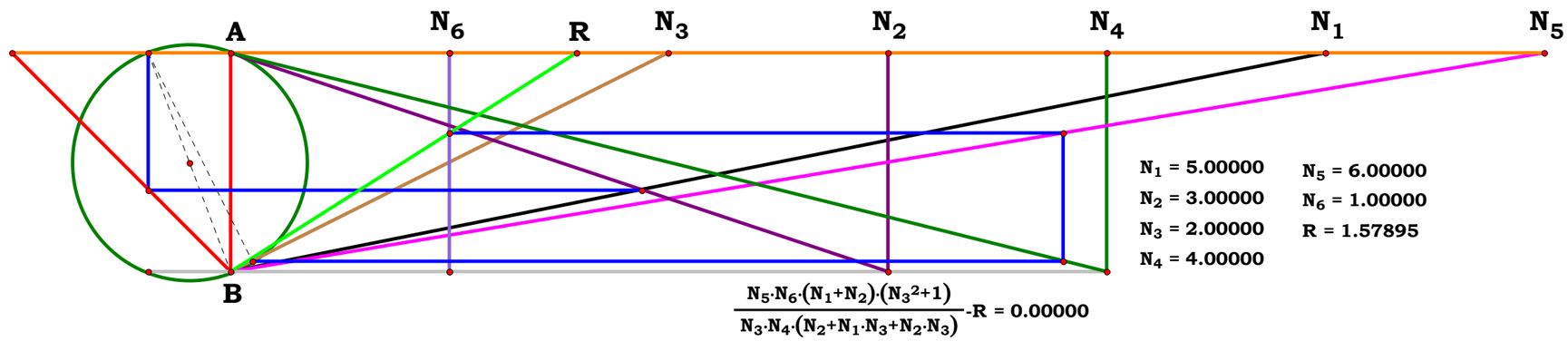
$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$GH := \frac{BN_3 - EN_3}{BN_3}$

$BH := N_4 \cdot (AB - GH)$

$FH := \frac{BH}{N_5}$ $R := \frac{N_6}{FH}$ $R = 3.73055$



$N_1 = 5.00000$ $N_5 = 6.00000$
$N_2 = 3.00000$ $N_6 = 1.00000$
$N_3 = 2.00000$ $R = 1.57895$
$N_4 = 4.00000$

$\frac{N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_5 \cdot N_6 \cdot (N_1 + N_2) \cdot (N_3^2 + 1)}{N_3 \cdot N_4 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)} = 0$$

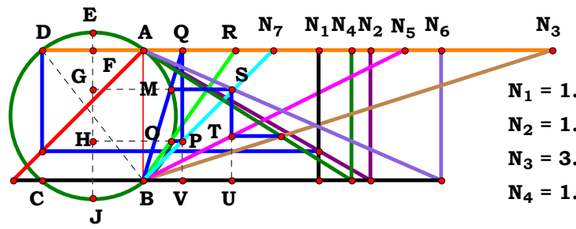
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{D \cdot (C^2 + N_u^2) \cdot (A + B)}{E \cdot F \cdot [A \cdot C + N_u \cdot (A + B)]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot n \cdot (U \cdot l + V \cdot k) \cdot (W^2 + m^2)}{W \cdot X \cdot o \cdot p \cdot (U \cdot W \cdot l + V \cdot W \cdot k + V \cdot k \cdot m)} = 0$$

4RST6AB5R1



N_1 = 1.34373 N_5 = 2.00496
N_2 = 1.74085 N_6 = 2.28585
N_3 = 3.14033 N_7 = 0.99764
N_4 = 1.59793 R = 0.70882

Unit. $AB := 1$ **Given.** $N_1 := 1.34373$ $N_2 := 1.74085$ $N_3 := 3.14033$
$N_4 := 1.59793$ $N_5 := 2.00496$ $N_6 := 2.28585$ $N_7 := .99764$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

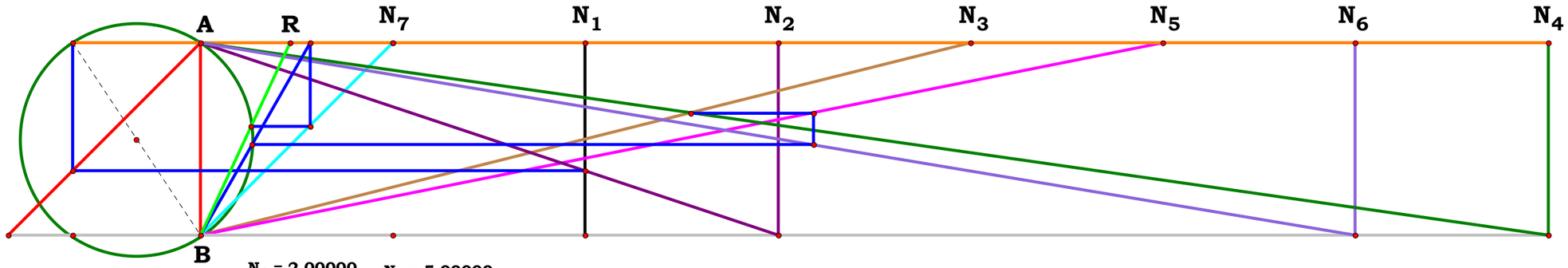
$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

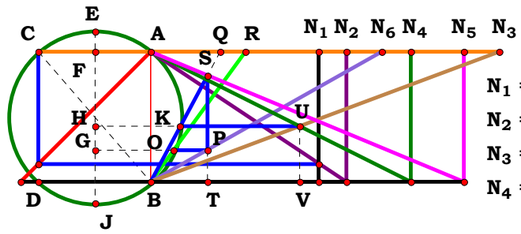
$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.708821$



N_1 = 2.00000 N_5 = 5.00000 AB = 1.00000 EF = 0.10093 GJ = 0.57062 HJ = 0.66901
N_2 = 3.00000 N_6 = 6.00000 AC = 0.66667 TU = 0.63636 GK = 0.60016 HO = 0.59706
N_3 = 4.00000 N_7 = 1.00000 EJ = 1.20185 BU = 3.18182 AQ = 0.56808 $R - \frac{HO - AF}{PV}$ = 0.00000
N_4 = 7.00000 R = 0.46423 AF = 0.33333 SU = 0.46970 PV = 0.56808

4RST6AB5R2



N_1 = 1.28562 N_5 = 2.40207
N_2 = 1.49870 N_6 = 1.77250
N_3 = 2.67541 R = 0.72925
N_4 = 1.99504

Unit. $AB := 1$ Given. $N_1 := 1.28562$ $N_2 := 1.49870$ $N_3 := 2.67541$
$N_4 := 1.99504$ $N_5 := 2.40207$ $N_6 := 1.77250$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

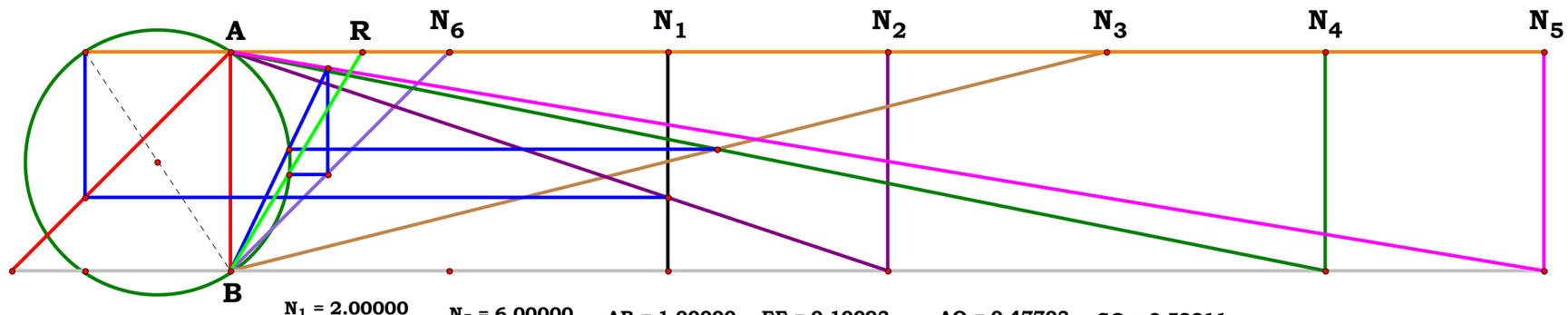
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

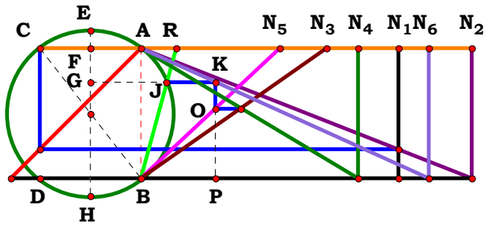
$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.729244$$



N_1 = 2.00000 N_5 = 6.00000 AB = 1.00000 EF = 0.10093 AQ = 0.47703 GO = 0.59811
N_2 = 3.00000 N_6 = 1.00000 AC = 0.66667 UV = 0.55556 BT = 0.44190 $R-\frac{GO-AF}{PT}$ = 0.00000
N_3 = 4.00000 R = 0.59918 EJ = 1.20185 HJ = 0.65648 PT = 0.44190
N_4 = 5.00000 AF = 0.33333 HK = 0.59835 GJ = 0.54282

4RST6AB5R3



$N_1 = 1.97331$
$N_2 = 2.53508$
$N_3 = 1.42595$
$N_4 = 1.66573$
$N_5 = 1.06544$
$N_6 = 2.20836$
$R = 0.26644$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.53508$ $N_3 := 1.42595$

$N_4 := 1.66573$ $N_5 := 1.06544$ $N_6 := 2.20836$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

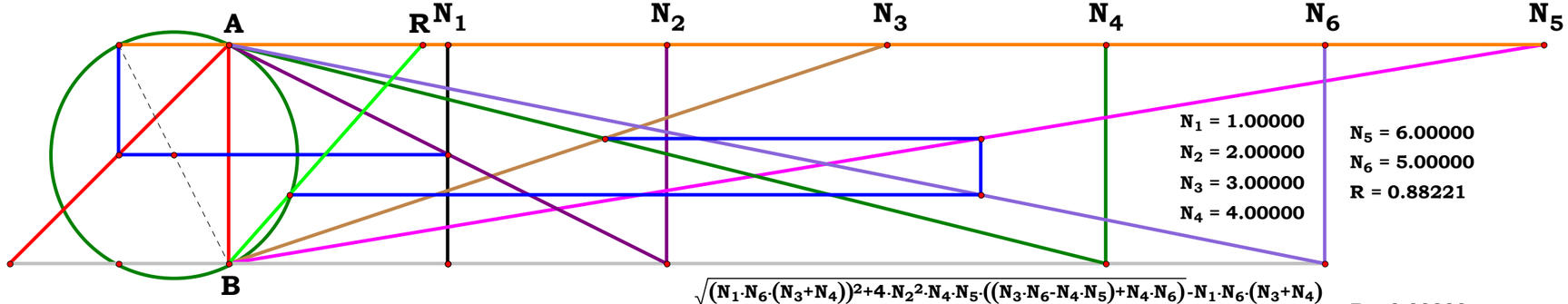
$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $EF := \frac{EH - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$KP := AB - \frac{BP}{N_6}$ $GH := KP + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GJ - AF}{KP}$ $R = 0.266443$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 6.00000$
$N_6 = 5.00000$
$R = 0.88221$

$\frac{\sqrt{(N_1 \cdot N_6 \cdot (N_3+N_4))^2+4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5)+N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3+N_4)}{2 \cdot N_2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5)+N_4 \cdot N_6)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

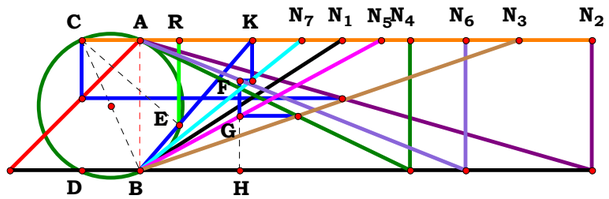
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot F \cdot (C \cdot E - C \cdot F + D \cdot E) + B^2 \cdot E^2 \cdot (C + D)^2} - B \cdot E \cdot (C + D)}{2 \cdot A \cdot [C \cdot (E - F) + D \cdot E]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{4 \cdot Y \cdot V^2 \cdot X \cdot Z \cdot k^2 \cdot m \cdot o \cdot p \cdot (W \cdot n + X \cdot m) - 4 \cdot V^2 \cdot X^2 \cdot k^2 \cdot m^2 \cdot p^2 \cdot Y^2 + U^2 \cdot Z^2 \cdot l^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2} - U \cdot Z \cdot l \cdot o \cdot (W \cdot n + X \cdot m)}{2 \cdot V \cdot k \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

4RST6AB5R4



$N_1 = 1.54713$ $N_3 = 2.90787$ $N_5 = 1.84998$ $N_7 = 1.23978$
$N_2 = 3.46492$ $N_4 = 2.07253$ $N_6 = 2.49893$ $R = 0.30489$

Descriptions.

$$AC := \frac{N_1}{N_2} \quad GH := \frac{N_4}{N_3 + N_4} \quad BH := N_5 \cdot GH$$

$$FH := \frac{N_6 - BH}{N_6}$$

$$AK := N_7 \cdot FH$$

$$BK := \sqrt{AK^2 + AB^2}$$

$$CK := AK + AC$$

$$EK := \frac{AK \cdot CK}{BK}$$

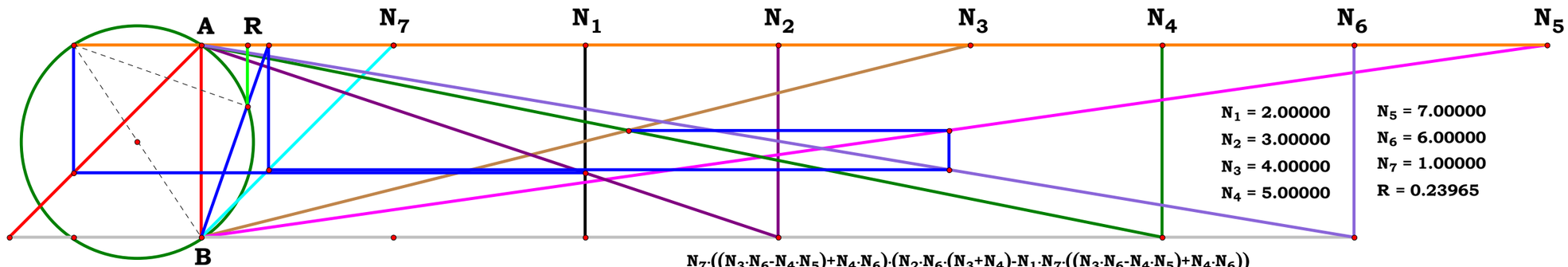
$$R := AK \cdot \frac{(BK - EK)}{BK} \qquad R = 0.30489$$

Unit. $AB := 1$ **Given.** $N_1 := 1.54713$ $N_2 := 3.46492$ $N_3 := 2.90787$ $N_4 := 2.07253$
$N_5 := 1.84998$ $N_6 := 2.49893$ $N_7 := 1.23978$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7}$$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$$j := \frac{T}{N_1} \quad k := \frac{U}{N_2} \quad l := \frac{V}{N_3} \quad m := \frac{W}{N_4} \quad n := \frac{X}{N_5} \quad o := \frac{Y}{N_6} \quad p := \frac{Z}{N_7}$$



$N_1 = 2.00000$ $N_5 = 7.00000$
$N_2 = 3.00000$ $N_6 = 6.00000$
$N_3 = 4.00000$ $N_7 = 1.00000$
$N_4 = 5.00000$ $R = 0.23965$

$$\frac{N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6) \cdot (N_2 \cdot N_6 \cdot (N_3 + N_4) - N_1 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6))}{N_2 \cdot (N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6) \cdot [N_2 \cdot N_6 \cdot (N_3 + N_4) - N_1 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)]}{N_2 \cdot [N_6^2 \cdot (N_3 + N_4)^2 + N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2]} = 0$$

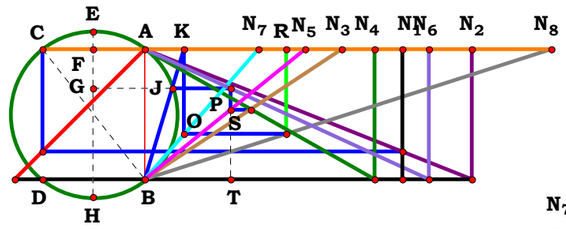
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0$$

$$R - \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot [A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)]}{N_u^2 \cdot A \cdot [C \cdot (E - F) + D \cdot E]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2} = 0$$

$$N_1 - \frac{T}{j} = 0 \quad N_2 - \frac{U}{k} = 0 \quad N_3 - \frac{V}{l} = 0 \quad N_4 - \frac{W}{m} = 0 \quad N_5 - \frac{X}{n} = 0 \quad N_6 - \frac{Y}{o} = 0 \quad N_7 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot [T \cdot W \cdot X \cdot Z \cdot k \cdot l \cdot o - Y \cdot n \cdot (T \cdot Z \cdot k - U \cdot j \cdot p) \cdot (V \cdot m + W \cdot l)]}{U \cdot j \cdot [Y^2 \cdot n^2 \cdot (Z^2 + p^2) \cdot (V \cdot m + W \cdot l)^2 - 2 \cdot Y \cdot W \cdot X \cdot Z^2 \cdot l \cdot n \cdot o \cdot (V \cdot m + W \cdot l) + W^2 \cdot X^2 \cdot Z^2 \cdot l^2 \cdot o^2]} = 0$$

4RST6AB5R5



$N_1 = 1.97331$ $N_3 = 1.51312$ $N_5 = 1.23009$ $N_7 = 0.87172$

$N_2 = 2.50603$ $N_4 = 1.76258$ $N_6 = 2.17930$ $N_8 = 3.11709$ $R = 1.08701$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.50603$ $N_3 := 1.51312$ $N_4 := 1.76258$

$N_5 := 1.23009$ $N_6 := 2.17930$ $N_7 := .87172$ $N_8 := 3.11709$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

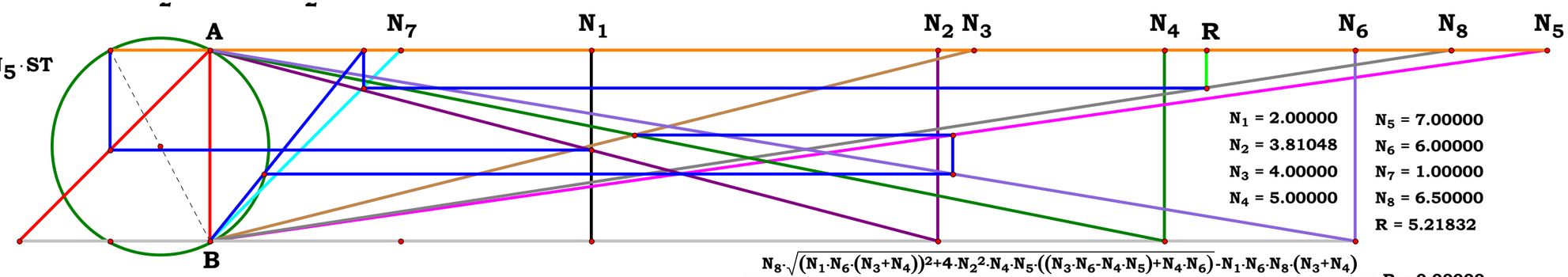
$ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$

$GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{(GJ - AF)}{PT}$ $KO := \frac{N_7 - AK}{N_7}$ $R := N_8 \cdot (AB - KO)$ $R = 1.087008$



$N_1 = 2.00000$ $N_5 = 7.00000$

$N_2 = 3.81048$ $N_6 = 6.00000$

$N_3 = 4.00000$ $N_7 = 1.00000$

$N_4 = 5.00000$ $N_8 = 6.50000$

$R = 5.21832$

$$\frac{N_8 \cdot \sqrt{(N_1 \cdot N_6 \cdot (N_3+N_4))^2+4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5)+N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot N_8 \cdot (N_3+N_4)}{2 \cdot N_2 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5)+N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{N_8 \cdot \left[\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3+N_4)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3+N_4)\right]}{2 \cdot N_2 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

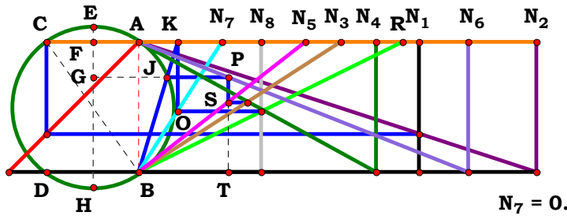
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{G \cdot \left[\sqrt{4 \cdot A^2 \cdot C \cdot F \cdot (C \cdot E - C \cdot F + D \cdot E) + B^2 \cdot E^2 \cdot (C+D)^2} - B \cdot E \cdot (C+D)\right]}{2 \cdot A \cdot H \cdot [C \cdot (E-F) + D \cdot E]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot o \cdot \left[\sqrt{4 \cdot W \cdot T^2 \cdot V \cdot X \cdot h^2 \cdot k \cdot m \cdot n \cdot (U \cdot l + V \cdot k) - 4 \cdot T^2 \cdot V^2 \cdot h^2 \cdot k^2 \cdot n^2 \cdot W^2 + S^2 \cdot X^2 \cdot j^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - S \cdot U \cdot X \cdot j \cdot l \cdot m - S \cdot V \cdot X \cdot j \cdot k \cdot m\right]}{2 \cdot T \cdot Y \cdot h \cdot p \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)} = 0$$

4RST6AB5R8



$N_7 = 0.63926$

$N_1 = 2.14765$ $N_3 = 1.55186$ $N_5 = 1.27852$ $N_8 = 0.93790$

$N_2 = 3.04843$ $N_4 = 1.82070$ $N_6 = 2.52799$ $R = 2.02073$

Descriptions.

Unit. $AB := 1$ **Given.** $N_1 := 2.14765$ $N_2 := 3.04843$ $N_3 := 1.55186$ $N_4 := 1.82070$

$N_5 := 1.27852$ $N_6 := 2.52799$ $N_7 := .63926$ $N_8 := .93790$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

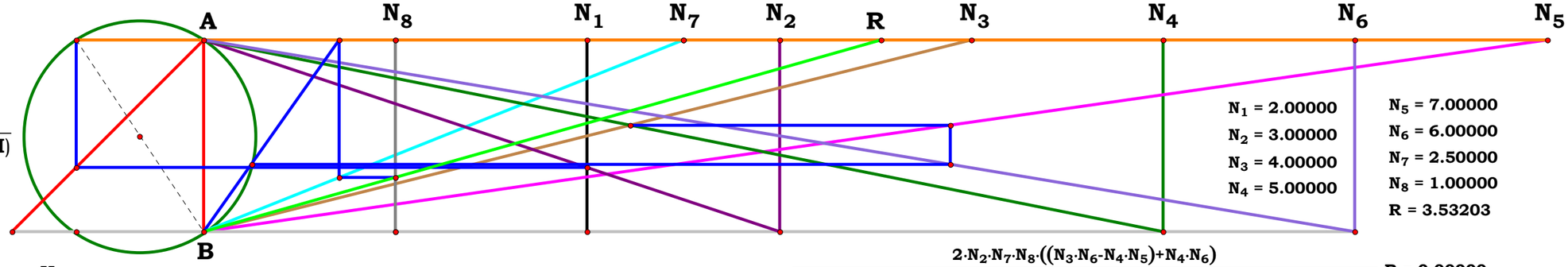
$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$

$GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$



$N_1 = 2.00000$ $N_5 = 7.00000$

$N_2 = 3.00000$ $N_6 = 6.00000$

$N_3 = 4.00000$ $N_7 = 2.50000$

$N_4 = 5.00000$ $N_8 = 1.00000$

$R = 3.53203$

$$\frac{2 \cdot N_2 \cdot N_7 \cdot N_8 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{\sqrt{(N_1 \cdot N_6 \cdot (N_3 + N_4))^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)} - R = 0.00000$$

$KO := \frac{N_7 - AK}{N_7}$ $R := \frac{N_8}{AB - KO}$ $R = 2.02073$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_7 \cdot N_8 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{\sqrt{N_1^2 \cdot N_6^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} - N_1 \cdot N_6 \cdot (N_3 + N_4)} = 0$$

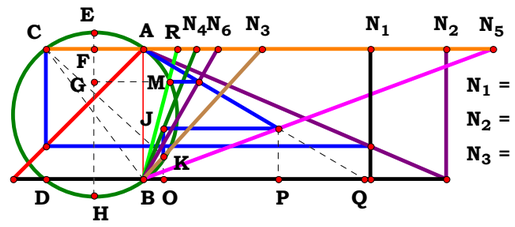
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{2 \cdot A \cdot N_u^2 \cdot [C \cdot (E - F) + D \cdot E]}{G \cdot H \cdot \left[\sqrt{4 \cdot A^2 \cdot C \cdot F \cdot (C \cdot E - C \cdot F + D \cdot E) + B^2 \cdot E^2 \cdot (C + D)^2} - B \cdot E \cdot (C + D)\right]} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot T \cdot Y \cdot Z \cdot h \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{o \cdot p \cdot \left[\sqrt{4 \cdot W \cdot T^2 \cdot V \cdot X \cdot h^2 \cdot k \cdot m \cdot n \cdot (U \cdot l + V \cdot k) - 4 \cdot T^2 \cdot V^2 \cdot h^2 \cdot k^2 \cdot n^2 \cdot W^2 + S^2 \cdot X^2 \cdot j^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2} - S \cdot U \cdot X \cdot j \cdot l \cdot m - S \cdot V \cdot X \cdot j \cdot k \cdot m\right]} = 0$$

4RST6AB5R9



$N_1 = 1.74085$
$N_2 = 2.32200$
$N_3 = 0.91260$
$N_4 = 0.40657$
$N_5 = 2.68296$
$N_6 = 0.57146$
$R = 0.26613$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 2.32200$ $N_3 := .91260$ $N_4 := .40657$ $N_5 := 2.68296$ $N_6 := .57146$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

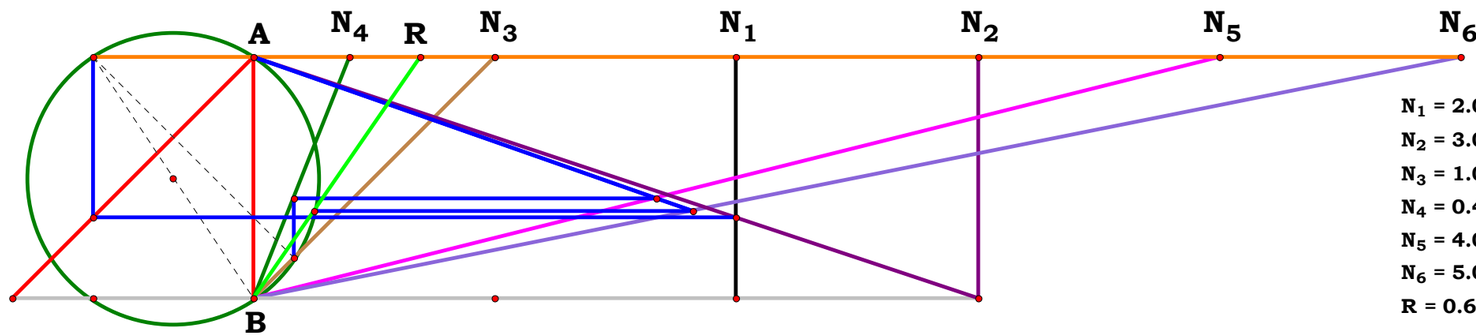
$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$

$KN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$N_5 = 4.00000$
$N_6 = 5.00000$
$R = 0.69277$

$JO := \frac{BO}{N_4}$ $BP := N_5 \cdot JO$

$$\frac{N_1\cdot(N_3\cdot(N_5-N_6)\cdot(N_2-N_1\cdot N_3)+N_2\cdot N_4\cdot N_6\cdot(N_3^2+1))-\sqrt{(N_1^2+N_2^2)\cdot(N_3\cdot(N_5-N_6)\cdot(N_2-N_1\cdot N_3)+N_2\cdot N_4\cdot N_6\cdot(N_3^2+1))^2-N_2^2\cdot(N_3\cdot(N_2-N_1\cdot N_3)\cdot(N_5+N_6)-N_2\cdot N_4\cdot N_6\cdot(N_3^2+1))^2}}{2\cdot N_2\cdot N_3\cdot N_5\cdot(N_1\cdot N_3-N_2)} - R = 0.00000$$

$BQ := \frac{BP \cdot AB}{AB - JO}$ $FG := \frac{N_6}{BQ + N_6}$ $EG := FG + EF$ $GM := \sqrt{EG \cdot (EH - EG)}$ $R := \frac{GM - AF}{AB - FG}$ $R = 0.266125$

Definitions.

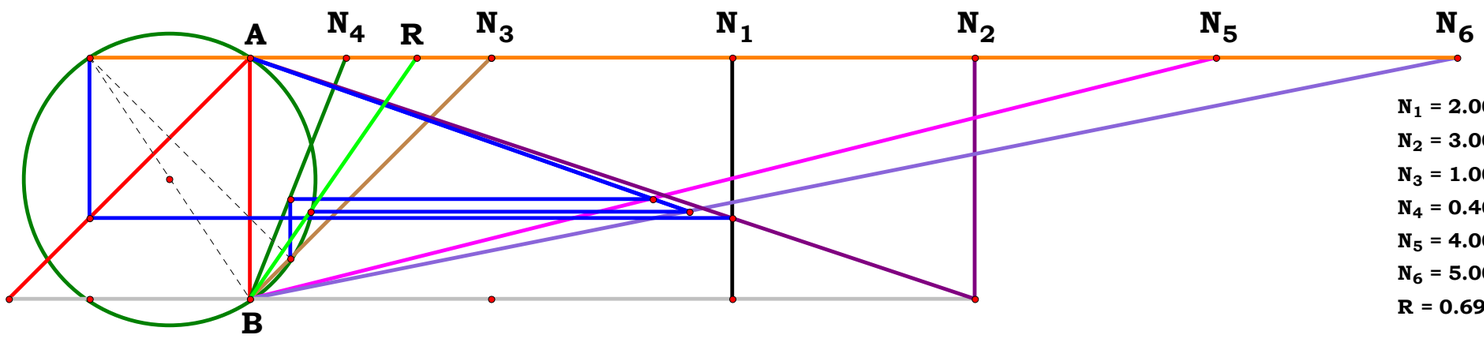
$$R - \frac{N_1 \cdot \left[N_3 \cdot (N_5 - N_6) \cdot (N_2 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1)\right] \ldots}{+ \ -\sqrt{(N_1^2 + N_2^2) \cdot \left[N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_5 - N_6) + N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1)\right]^2 - N_2^2 \cdot \left[N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_5 + N_6) - N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1)\right]^2}}{2 \cdot N_2 \cdot N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\left[\begin{array}{l}\sqrt{D \cdot F \cdot (A \cdot C - B \cdot N_u) \cdot \left[2 \cdot E \cdot (2 \cdot A^2 + B^2) \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] + B^2 \cdot D \cdot F \cdot (A \cdot C - B \cdot N_u)\right] + B^2 \cdot E^2 \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right]^2} - A \cdot B \cdot E \cdot N_u^2 \ \ldots \\ + \ (B^2 \cdot D \cdot F - B^2 \cdot D \cdot E) \cdot N_u - A \cdot B \cdot C \cdot (C \cdot E - D \cdot E + D \cdot F)\end{array}\right]}{2 \cdot A \cdot D \cdot F \cdot (A \cdot C - B \cdot N_u)} = 0$$

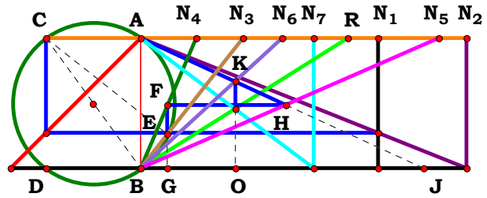
$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{X \cdot U \cdot V \cdot Z \cdot k \cdot l \cdot o \cdot \left(W^2 + m^2\right) - U \cdot W \cdot l \cdot n \cdot (Y \cdot p - Z \cdot o) \cdot (U \cdot W \cdot l - V \cdot k \cdot m) - \sqrt{\begin{matrix} X^2 \cdot U^2 \cdot V^2 \cdot Z^2 \cdot k^2 \cdot l^2 \cdot o^2 \cdot \left(W^2 + m^2\right)^2 \ \ldots \\ + \ -2 \cdot X \cdot V \cdot W \cdot Z \cdot k \cdot n \cdot o \cdot \left(W^2 + m^2\right) \cdot (U \cdot W \cdot l - V \cdot k \cdot m) \cdot \left(U^2 \cdot Y \cdot l^2 \cdot p - U^2 \cdot Z \cdot l^2 \cdot o + 2 \cdot V^2 \cdot Y \cdot k^2 \cdot p\right) \ \ldots \\ + \ W^2 \cdot n^2 \cdot (U \cdot W \cdot l - V \cdot k \cdot m)^2 \cdot \left(U^2 \cdot Y^2 \cdot l^2 \cdot p^2 - 2 \cdot U^2 \cdot Y \cdot Z \cdot l^2 \cdot o \cdot p + U^2 \cdot Z^2 \cdot l^2 \cdot o^2 - 4 \cdot V^2 \cdot Y \cdot Z \cdot k^2 \cdot o \cdot p\right) \end{matrix}}}{2 \cdot V \cdot W \cdot Y \cdot k \cdot n \cdot p \cdot (U \cdot W \cdot l - V \cdot k \cdot m)} = 0$$



$$\frac{N_1 \cdot (N_3 \cdot (N_5 - N_6) \cdot (N_2 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1)) - \sqrt{(N_1^2 + N_2^2) \cdot (N_3 \cdot (N_5 - N_6) \cdot (N_2 - N_1 \cdot N_3) + N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1))^2 - N_2^2 \cdot (N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_5 + N_6) - N_2 \cdot N_4 \cdot N_6 \cdot (N_3^2 + 1))^2}}{2 \cdot N_2 \cdot N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_2)} - R = 0.00000$$

4RST6AB5R10



$N_1 = 1.81833$ $N_3 = 0.78668$ $N_5 = 2.28585$ $N_7 = 1.32695$

$N_2 = 2.49634$ $N_4 = 0.42595$ $N_6 = 1.08481$ $R = 1.59029$

Unit. $AB := 1$ **Given.** $N_1 := 1.81833$ $N_2 := 2.49634$ $N_3 := .78668$ $N_4 := .42595$

$N_5 := 2.28585$ $N_6 := 1.08481$ $N_7 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

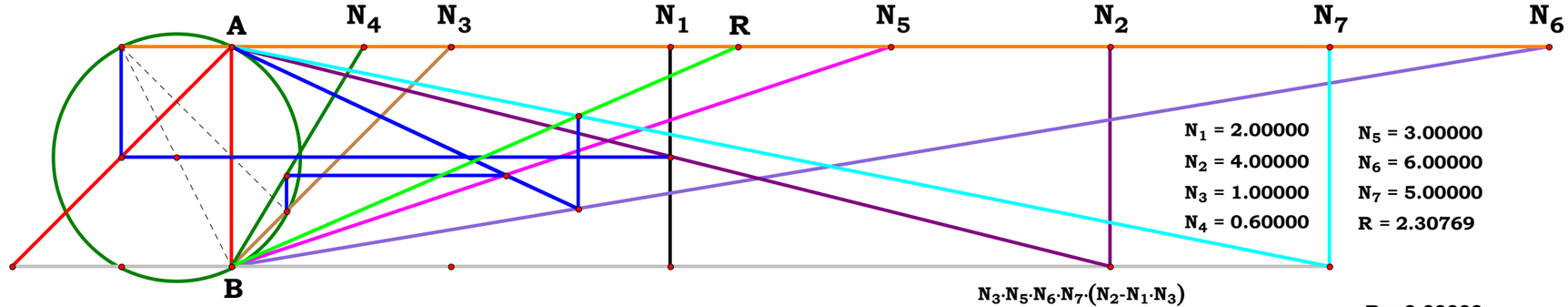
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$FH := N_5 \cdot FG$ $BJ := \frac{FH}{(AB - FG)}$

$BO := \frac{N_6 \cdot BJ}{N_6 + BJ}$ $KO := \frac{N_7 - BO}{N_7}$

$R := \frac{BO}{KO}$ $R = 1.590298$



$N_1 = 2.00000$ $N_5 = 3.00000$

$N_2 = 4.00000$ $N_6 = 6.00000$

$N_3 = 1.00000$ $N_7 = 5.00000$

$N_4 = 0.60000$ $R = 2.30769$

$$\frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_2 - N_1 \cdot N_3)}{N_2 \cdot N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2+1) - N_3 \cdot ((N_5 \cdot N_6 - N_5 \cdot N_7) + N_6 \cdot N_7) \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_2 - N_1 \cdot N_3)}{N_2 \cdot N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) - N_3 \cdot (N_5 \cdot N_6 - N_5 \cdot N_7 + N_6 \cdot N_7) \cdot (N_2 - N_1 \cdot N_3)} = 0$$

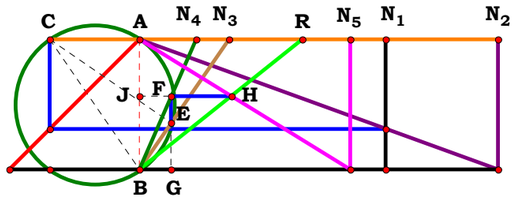
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{D \cdot N_u \cdot (A \cdot C - B \cdot N_u)}{F \cdot D \cdot (A \cdot C - B \cdot N_u) + \left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right]\right] - D \cdot G \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (U \cdot j \cdot l - T \cdot V \cdot k)}{W \cdot U \cdot Y \cdot Z \cdot j \cdot n \cdot (V^2 + l^2) + V \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n) \cdot (T \cdot V \cdot k - U \cdot j \cdot l)} = 0$$

4RST6AB5R11



$N_1 = 1.88613$
$N_2 = 2.74817$
$N_3 = 0.68983$
$N_4 = 0.43563$
$N_5 = 1.61753$
$R = 1.24554$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := 2.74817$ $N_3 := .68983$

$N_4 := .43563$ $N_5 := 1.61753$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

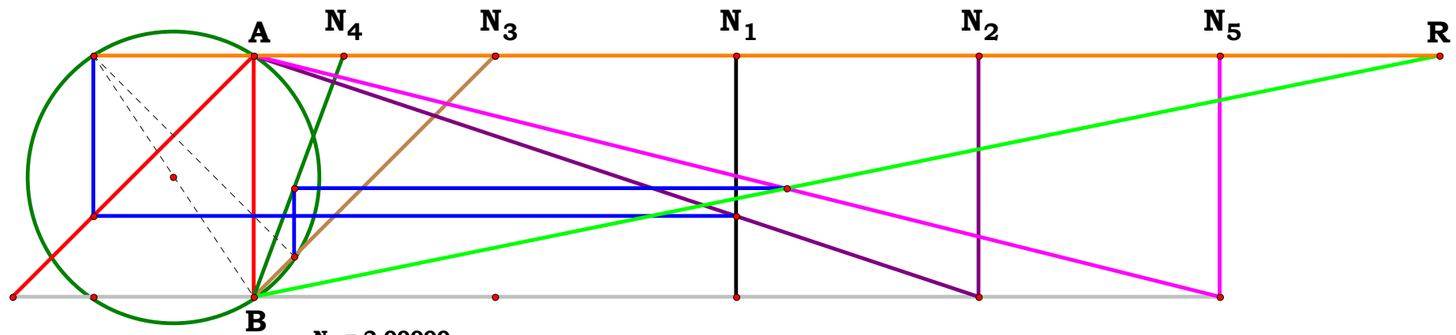
$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$HJ := N_5 \cdot (AB - FG)$ $R := \frac{HJ}{FG}$

$R = 1.245537$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$N_4 = 0.37128$
$N_5 = 4.00000$
$R = 4.91064$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) - N_3 \cdot N_5 \cdot (N_2 - N_1 \cdot N_3)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) - N_3 \cdot N_5 \cdot (N_2 - N_1 \cdot N_3)}{N_3 \cdot (N_2 - N_1 \cdot N_3)} = 0$$

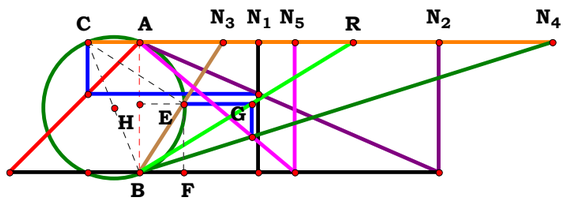
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot [A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)]}{D \cdot E \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot [X^2 \cdot (W \cdot Y \cdot l + V \cdot m \cdot o) - W \cdot l \cdot n \cdot (X \cdot o - Y \cdot n)]}{X \cdot o \cdot p \cdot (W \cdot l \cdot n - V \cdot X \cdot m)} = 0$$

4RST6AB5R12



$N_1 = 0.90787$
$N_2 = 2.29294$
$N_3 = 0.64140$
$N_4 = 3.16702$
$N_5 = 1.19135$
$R = 1.63776$

Unit. $AB := 1$ **Given.** $N_1 := .90787$ $N_2 := 2.29294$ $N_3 := .64140$ $N_4 := 3.16702$ $N_5 := 1.19135$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 1.63776$

Definitions.

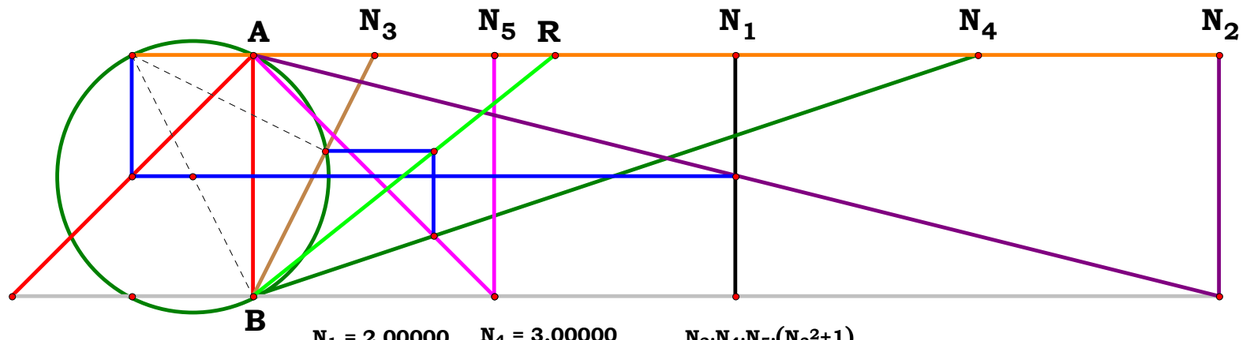
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_2 - N_1 \cdot N_3) \cdot (N_4 + N_5)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{C \cdot (D + E) \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{n \cdot (W \cdot l \cdot n - V \cdot X \cdot m) \cdot (Y \cdot p + Z \cdot o)} = 0$$

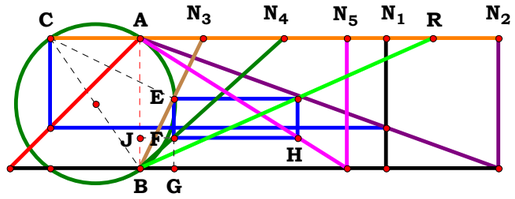


$N_1 = 2.00000$ $N_4 = 3.00000$ $\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{(N_2 - N_1 \cdot N_3) \cdot (N_4 + N_5)} - R = 0.00000$

$N_2 = 4.00000$ $N_5 = 1.00000$

$N_3 = 0.50000$ $R = 1.25000$

4RST6AB5R13



$N_1 = 1.88613$
$N_2 = 2.74817$
$N_3 = 0.48642$
$N_4 = 1.10395$
$N_5 = 1.58847$
$R = 2.24882$

Unit. $AB := 1$ **Given.** $N_1 := 1.88613$ $N_2 := 2.74817$ $N_3 := .48642$

$N_4 := 1.10395$ $N_5 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

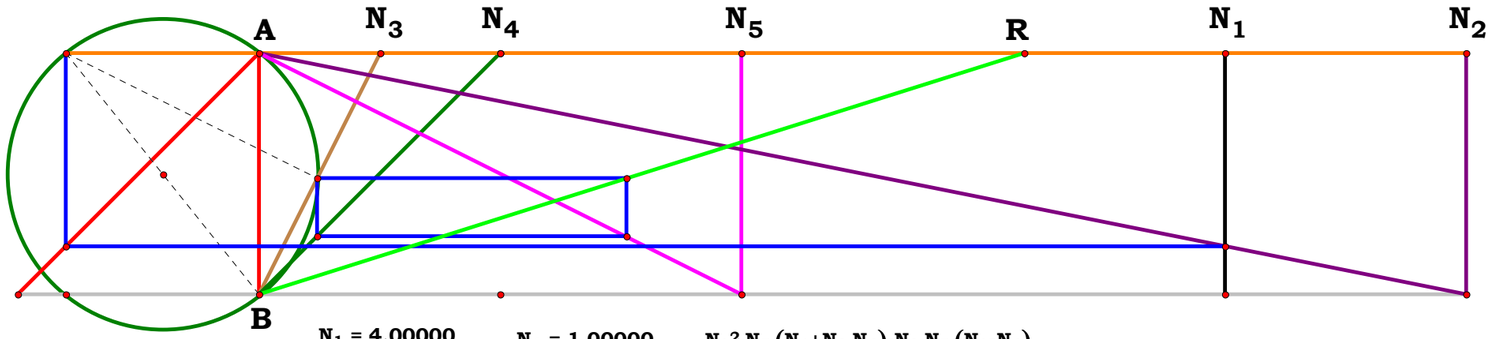
$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$ $EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 2.2488$



$N_1 = 4.00000$
$N_2 = 5.00000$
$N_3 = 0.50000$
$N_4 = 1.00000$
$N_5 = 2.00000$
$R = 3.16667$

$\frac{N_3^2 \cdot N_5 \cdot (N_1 + N_2 \cdot N_4) - N_2 \cdot N_5 \cdot (N_3 - N_4)}{N_4 \cdot (N_2 - N_1 \cdot N_3)} - R = 0.00000$

Definitions.

$$R - \frac{N_3^2 \cdot N_5 \cdot (N_1 + N_2 \cdot N_4) - N_2 \cdot N_5 \cdot (N_3 - N_4)}{N_4 \cdot (N_2 - N_1 \cdot N_3)} = 0$$

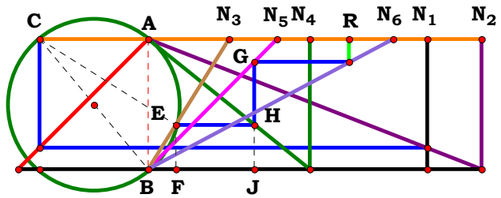
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot [A \cdot C \cdot (C - D) + N_u \cdot (B \cdot D + A \cdot N_u)]}{C \cdot E \cdot (A \cdot C - B \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot W \cdot Z \cdot l \cdot (X^2 + n^2) + X \cdot Z \cdot o \cdot (V \cdot X \cdot m - W \cdot l \cdot n)}{Y \cdot n \cdot p \cdot (W \cdot l \cdot n - V \cdot X \cdot m)} = 0$$

4RST6AB5R14



$N_1 = 2.13797$
$N_2 = 2.55445$
$N_3 = 0.62203$
$N_4 = 1.23955$
$N_5 = 0.98795$
$N_6 = 1.87904$
$R = 1.54267$

Unit. $AB := 1$ **Given.** $N_1 := 2.13797$ $N_2 := 2.55446$ $N_3 := .62203$ $N_4 := 1.23955$ $N_5 := .98795$ $N_6 := 1.87904$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

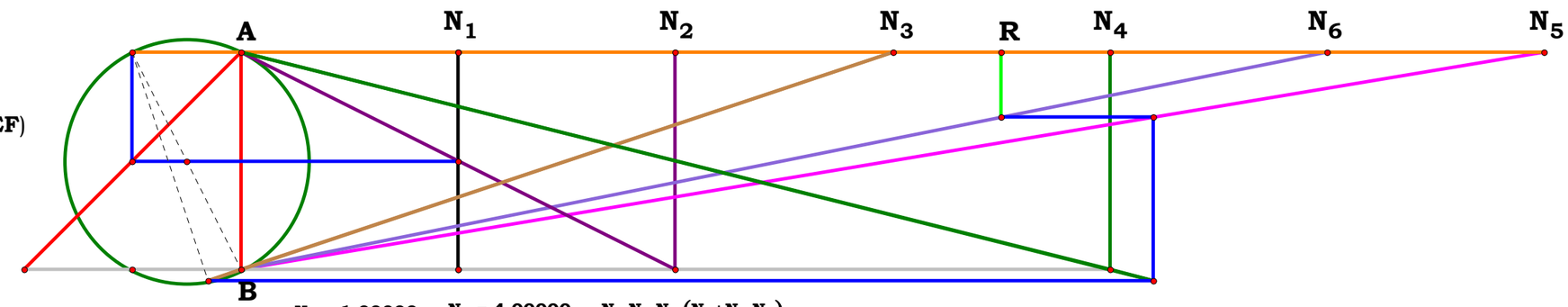
$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - EF)$

$GH := \frac{BH}{N_5}$ $R := N_6 \cdot GH$

$R = 1.542679$



$N_1 = 1.00000$ $N_4 = 4.00000$ $\frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_1 + N_2 \cdot N_3)}{N_2 \cdot N_5 \cdot (N_3^2 + 1)} - R = 0.00000$

$N_2 = 2.00000$ $N_5 = 6.00000$

$N_3 = 3.00000$ $N_6 = 5.00000$

$R = 3.50000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot (N_1 + N_2 \cdot N_3)}{N_2 \cdot N_5 \cdot (N_3^2 + 1)} = 0$$

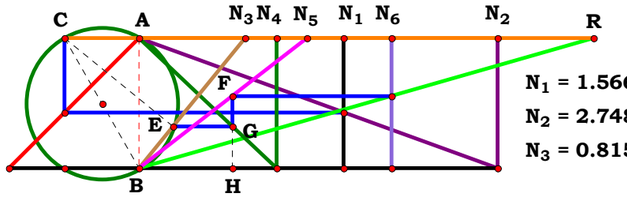
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u)}{F \cdot [A \cdot D \cdot (C^2 + N_u^2)]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (V \cdot W \cdot k + U \cdot l \cdot m)}{p \cdot V \cdot Y \cdot k \cdot n \cdot (W^2 + m^2)} = 0$$

4RST6AB5R15



$N_1 = 1.56650$ $N_4 = 1.05552$
$N_2 = 2.74817$ $N_5 = 1.28821$
$N_3 = 0.81574$ $N_6 = 1.93716$
$R = 3.48314$

Unit. $AB := 1$ **Given.** $N_1 := 1.56650$ $N_2 := 2.74817$ $N_3 := .81574$

$N_4 := 1.05552$ $N_5 := 1.28821$ $N_6 := 1.93716$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$GH := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - GH)$

$FH := \frac{BH}{N_5}$ $R := \frac{N_6}{FH}$ $R = 3.483165$

Definitions.

$$R - \frac{N_2 \cdot N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(N_1 + N_2 \cdot N_3\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

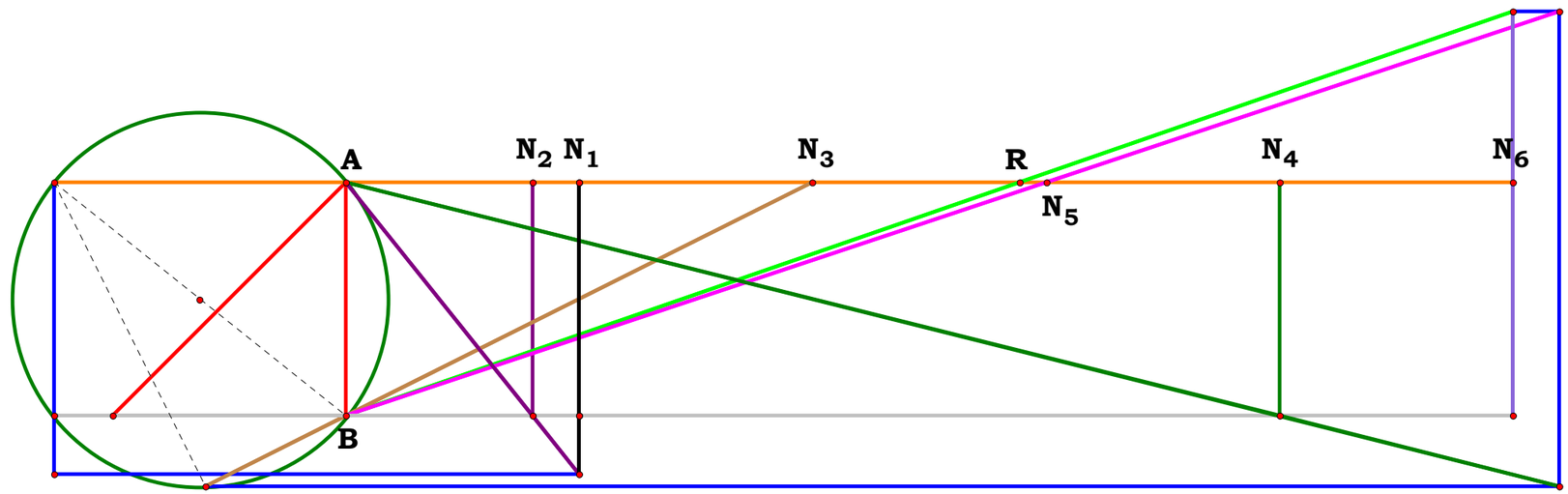
$N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{A \cdot D \cdot \left(C^2 + N_u^2\right)}{E \cdot F \cdot \left(B \cdot C + A \cdot N_u\right)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$

$N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot k \cdot n \cdot \left(W^2 + m^2\right)}{o \cdot p \cdot [W \cdot X \cdot (V \cdot W \cdot k + U \cdot l \cdot m)]} = 0$$



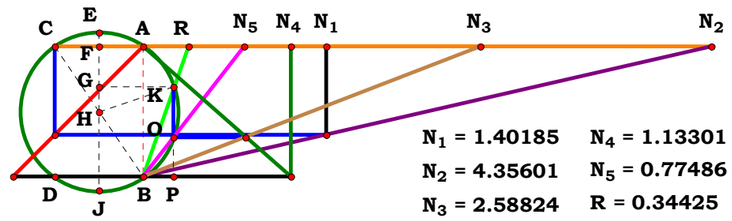
$N_1 = 1.00000$ $N_4 = 4.00000$ $\frac{N_2 \cdot N_5 \cdot N_6 \cdot \left(N_3^2+1\right)}{N_3 \cdot N_4 \cdot \left(N_1+N_2 \cdot N_3\right)} - R = 0.00000$

$N_2 = 0.80000$ $N_5 = 3.00000$

$N_3 = 2.00000$ $N_6 = 5.00000$

$R = 2.88462$

4RST6AB6R0



$N_1 = 1.40185$ $N_4 = 1.13301$
$N_2 = 4.35601$ $N_5 = 0.77486$
$N_3 = 2.58824$ $R = 0.34425$

Unit. $AB := 1$ **Given.** $N_1 := 1.40185$ $N_2 := 4.35601$ $N_3 := 2.58824$

$N_4 := 1.13301$ $N_5 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

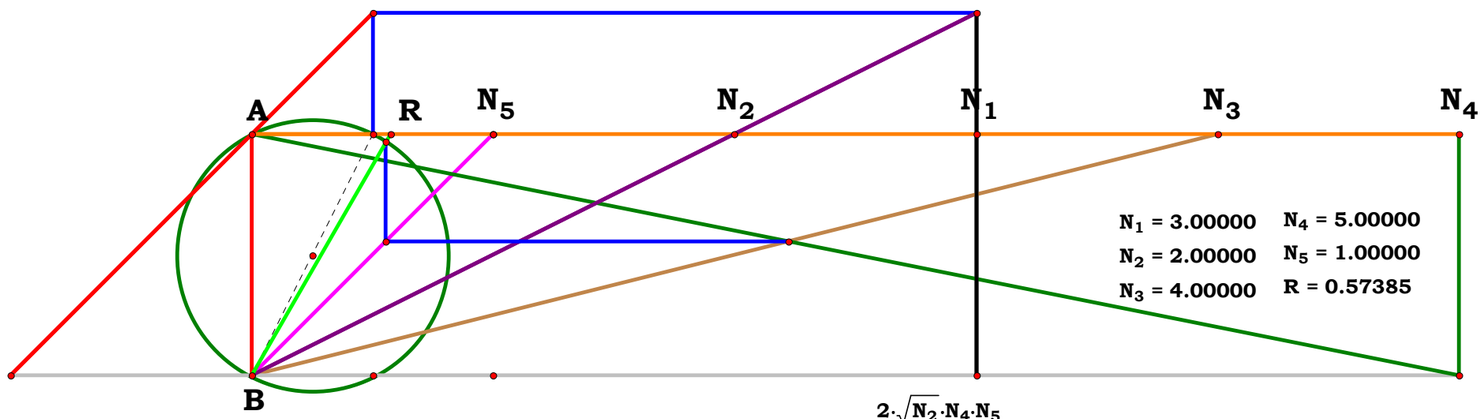
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_5 \cdot OP$

$GK := BP + AF$ $HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$KO := \frac{AB}{2} + GH$ $R := \frac{BP}{KO}$ $R = 0.344251$



$N_1 = 3.00000$ $N_4 = 5.00000$
$N_2 = 2.00000$ $N_5 = 1.00000$
$N_3 = 4.00000$ $R = 0.57385$

$$\frac{2 \cdot \sqrt{N_2} \cdot N_4 \cdot N_5}{\sqrt{N_2} \cdot (N_3 + N_4) + \sqrt{(N_2 \cdot (N_3 + N_4)^2 - 4 \cdot N_2 \cdot N_4^2 \cdot N_5^2) + 4 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2) \cdot (N_3 + N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_4 \cdot N_5}{\sqrt{N_2} \cdot (N_3 + N_4) + \sqrt{N_2 \cdot (N_3 + N_4)^2 - 4 \cdot N_2 \cdot N_4^2 \cdot N_5^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}} = 0$$

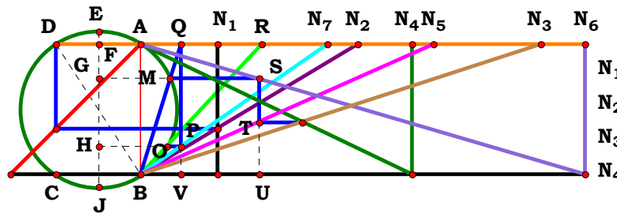
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{2 \cdot C \cdot \left(\sqrt{N_u}\right)^3 \cdot \sqrt{A \cdot B}}{\sqrt{B} \cdot \sqrt{N_u \cdot \left[A \cdot E^2 \cdot (C + D)^2 - 4 \cdot A \cdot C^2 \cdot N_u^2 - 4 \cdot N_u \cdot C \cdot E \cdot (C + D) \cdot (A - B)\right]} + \sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot E \cdot (C + D)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{W} \cdot Y \cdot Z \cdot n \cdot \sqrt{l \cdot m}}{\sqrt{4 \cdot Z \cdot Y \cdot n \cdot p \cdot (X \cdot o + Y \cdot n) \cdot (V \cdot m - W \cdot l) - 4 \cdot W \cdot Y^2 \cdot l \cdot n^2 \cdot Z^2 + W \cdot l \cdot p^2 \cdot (X \cdot o + Y \cdot n)^2} \cdot \sqrt{m} + \sqrt{l \cdot m} \cdot \sqrt{W} \cdot p \cdot (X \cdot o + Y \cdot n)} = 0$$

4RST6AB6R1



N_1 = 0.58824 N_5 = 2.24710
N_2 = 1.66336 N_6 = 3.40940
N_3 = 3.07253 N_7 = 1.43350
N_4 = 2.08221 R = 0.93106

Unit. $AB := 1$ **Given.** $N_1 := .58824$ $N_2 := 1.66336$ $N_3 := 3.07253$
$N_4 := 2.08221$ $N_5 := 2.24710$ $N_6 := 3.40940$ $N_7 := 1.43350$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

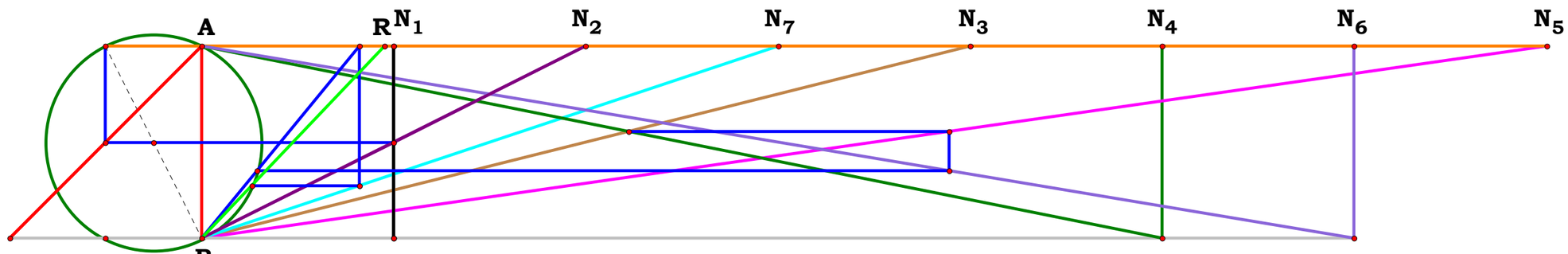
$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

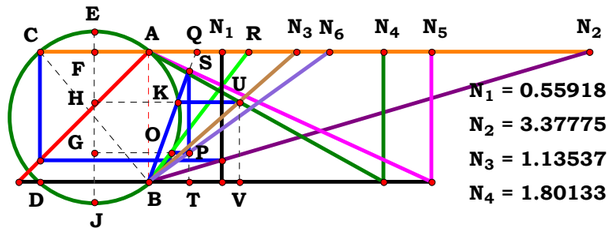
$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.931063$



N_1 = 1.00000 N_5 = 7.00000 AB = 1.00000 EF = 0.05902 GJ = 0.41087 HJ = 0.33283
N_2 = 2.00000 N_6 = 6.00000 AC = 0.50000 TU = 0.55556 GK = 0.53903 HO = 0.51122
N_3 = 4.00000 N_7 = 3.00000 EJ = 1.11803 BU = 3.88889 AQ = 0.82145 $R - \frac{HO - AF}{PV}$ = 0.00000
N_4 = 5.00000 R = 0.95398 AF = 0.25000 SU = 0.35185 PV = 0.27382

4RST6AB6R2



$N_1 = 0.55918$ $N_5 = 2.16962$
$N_2 = 3.37775$ $N_6 = 1.38507$
$N_3 = 1.13537$ $R = 0.76826$
$N_4 = 1.80133$

Unit. $AB := 1$ **Given.** $N_1 := .55918$ $N_2 := 3.37775$ $N_3 := 1.13537$
$N_4 := 1.80133$ $N_5 := 2.16962$ $N_6 := 1.38507$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

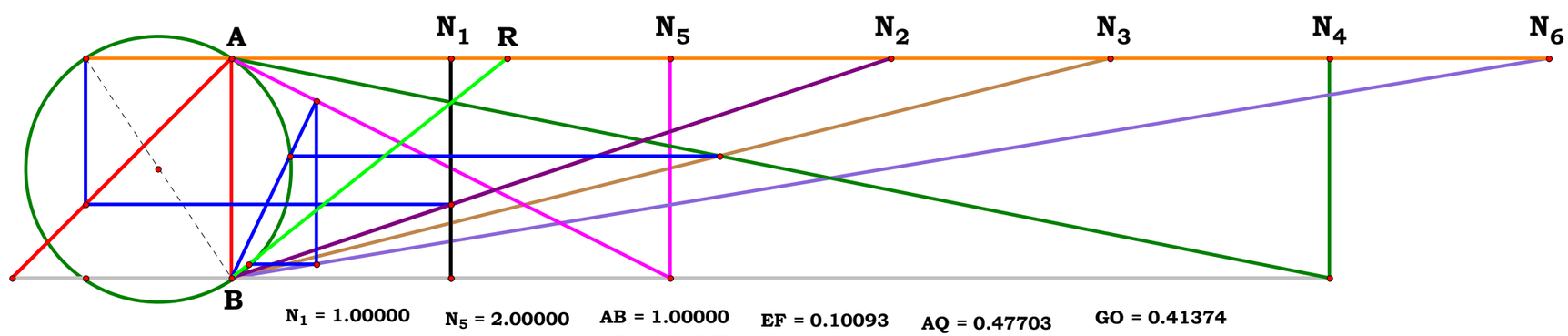
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

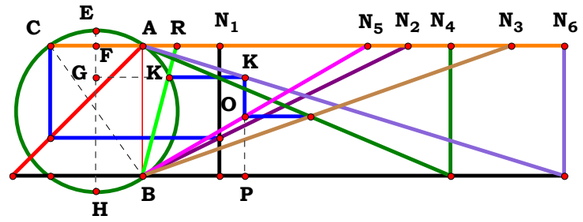
$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.768258$$



$N_1 = 1.00000$ $N_5 = 2.00000$ $AB = 1.00000$ $EF = 0.10093$ $AQ = 0.47703$ $GO = 0.41374$
$N_2 = 3.00000$ $N_6 = 6.00000$ $AC = 0.66667$ $UV = 0.55556$ $BT = 0.38516$ $R\text{-}\frac{GO\text{-}AF}{PT} = 0.00000$
$N_3 = 4.00000$ $R = 1.25262$ $EJ = 1.20185$ $HJ = 0.65648$ $PT = 0.06419$
$N_4 = 5.00000$ $AF = 0.33333$ $HK = 0.59835$ $GJ = 0.16512$

4RST6AB6R3



$N_1 = 0.58824$
$N_2 = 2.03142$
$N_3 = 2.83038$
$N_4 = 2.36310$
$N_5 = 1.72407$
$N_6 = 3.23505$
$R = 0.26593$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2} \qquad EF := \frac{EH - AB}{2}$$

$$AF := \frac{AC}{2} \qquad OP := \frac{N_4}{N_3 + N_4} \qquad BP := N_5 \cdot OP$$

$$KP := AB - \frac{BP}{N_6} \qquad GH := KP + EF$$

$$GJ := \sqrt{GH \cdot (EH - GH)} \qquad R := \frac{GJ - AF}{KP}$$

$R = 0.265928$

Definitions.

$$R - \frac{\sqrt{N_6^2 \cdot (N_3 + N_4)^2 \cdot (N_1 - N_2)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} + N_6 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}{2 \cdot N_2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0$$

$$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot F \cdot (C \cdot E - C \cdot F + D \cdot E) + E^2 \cdot (C + D)^2 \cdot (A - B)^2} - E \cdot (C + D) \cdot (A - B)}{2 \cdot A \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$$N_1 - \frac{U}{k} = 0 \quad N_2 - \frac{V}{l} = 0 \quad N_3 - \frac{W}{m} = 0 \quad N_4 - \frac{X}{n} = 0 \quad N_5 - \frac{Y}{o} = 0 \quad N_6 - \frac{Z}{p} = 0$$

$$R - \frac{\sqrt{Z^2 \cdot o^2 \cdot (W \cdot n + X \cdot m)^2 \cdot (U \cdot l - V \cdot k)^2 + 4 \cdot Z \cdot V^2 \cdot X \cdot Y \cdot k^2 \cdot m \cdot o \cdot p \cdot (W \cdot n + X \cdot m) - 4 \cdot V^2 \cdot X^2 \cdot Y^2 \cdot k^2 \cdot m^2 \cdot p^2} + Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot (U \cdot l - V \cdot k)}{2 \cdot V \cdot k \cdot (W \cdot Z \cdot n \cdot o - X \cdot Y \cdot m \cdot p + X \cdot Z \cdot m \cdot o)} = 0$$

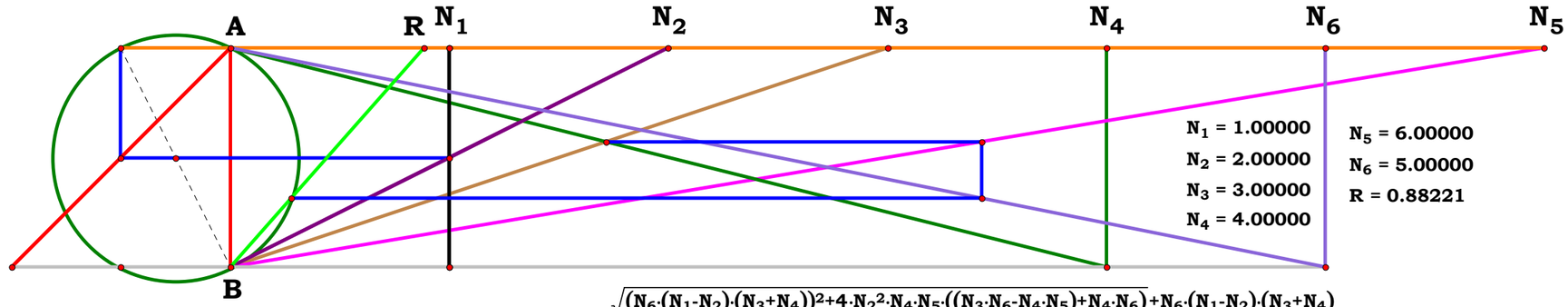
Unit. $AB := 1$ **Given.** $N_1 := .58824$ $N_2 := 2.03142$ $N_3 := 2.83038$

$N_4 := 2.36310$ $N_5 := 1.72407$ $N_6 := 3.23505$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

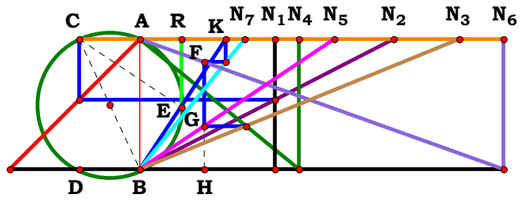
$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 6.00000$
$N_6 = 5.00000$
$R = 0.88221$

$$\frac{\sqrt{(N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4))^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} + N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

4RST6AB6R4



$N_1 = 1.03379$ $N_3 = 2.45264$ $N_5 = 1.49161$ $N_7 = 0.80392$

$N_2 = 1.94425$ $N_4 = 1.22018$ $N_6 = 2.78951$ $R = 0.31762$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad GH := \frac{N_4}{N_3 + N_4}$$

$$BH := N_5 \cdot GH \qquad FH := \frac{N_6 - BH}{N_6}$$

$$AK := N_7 \cdot FH \qquad BK := \sqrt{AK^2 + AB^2}$$

$$CK := AK + AC \qquad EK := \frac{AK \cdot CK}{BK}$$

$$R := AK \cdot \frac{(BK - EK)}{BK} \qquad R = 0.317619$$

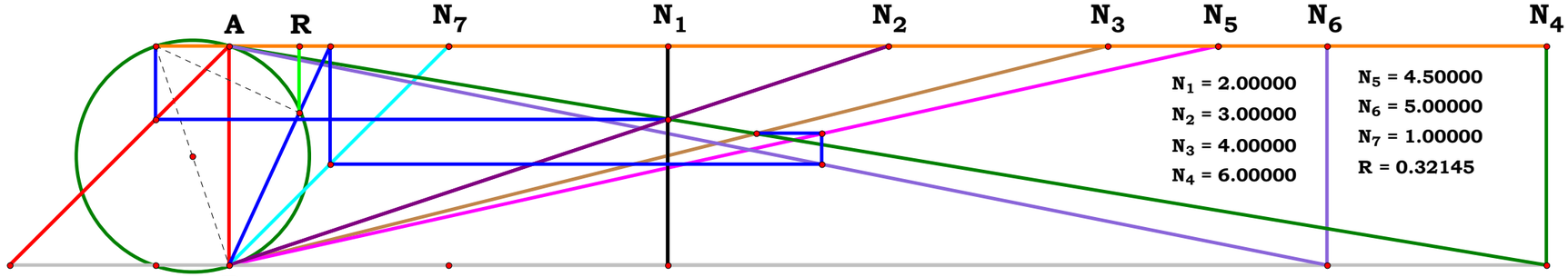
Unit. $AB := 1$ **Given.** $N_1 := 1.03379$ $N_2 := 1.94425$ $N_3 := 2.45264$ $N_4 := 1.22018$

$N_5 := 1.49161$ $N_6 := 2.78951$ $N_7 := .80392$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7}$$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$$j := \frac{T}{N_1} \quad k := \frac{U}{N_2} \quad l := \frac{V}{N_3} \quad m := \frac{W}{N_4} \quad n := \frac{X}{N_5} \quad o := \frac{Y}{N_6} \quad p := \frac{Z}{N_7}$$



Definitions.

B

$$R - \frac{N_7^2 \cdot (N_1 - N_2) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2 + N_2 \cdot N_6 \cdot N_7 \cdot (N_3 + N_4) \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{N_2 \cdot \left[N_7^2 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)^2 + N_6^2 \cdot (N_3 + N_4)^2 \right]} = 0$$

$$\frac{N_7^2 \cdot (N_1 - N_2) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2 + N_2 \cdot N_6 \cdot N_7 \cdot (N_3 + N_4) \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{N_2 \cdot (N_7^2 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)^2 + N_6^2 \cdot (N_3 + N_4)^2)} - R = 0.00000$$

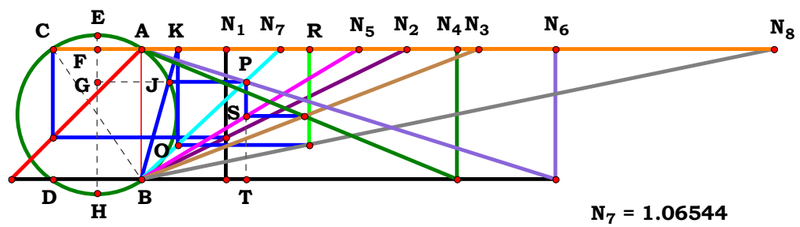
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0 \quad N_6 - \frac{N_u}{F} = 0 \quad N_7 - \frac{N_u}{G} = 0$$

$$R - \frac{N_u \cdot (C \cdot E - C \cdot F + D \cdot E) \cdot \left[A \cdot E \cdot G \cdot (C + D) - N_u \cdot (A - B) \cdot (C \cdot E - C \cdot F + D \cdot E) \right]}{A \cdot \left[N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2 + E^2 \cdot G^2 \cdot (C + D)^2 \right]} = 0$$

$$N_1 - \frac{T}{j} = 0 \quad N_2 - \frac{U}{k} = 0 \quad N_3 - \frac{V}{l} = 0 \quad N_4 - \frac{W}{m} = 0 \quad N_5 - \frac{X}{n} = 0 \quad N_6 - \frac{Y}{o} = 0 \quad N_7 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot [Z \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n) \cdot (T \cdot k - U \cdot j) + U \cdot Y \cdot j \cdot n \cdot p \cdot (V \cdot m + W \cdot l)]}{U \cdot j \cdot \left[Z^2 \cdot (V \cdot Y \cdot m \cdot n - W \cdot X \cdot l \cdot o + W \cdot Y \cdot l \cdot n)^2 + Y^2 \cdot n^2 \cdot p^2 \cdot (V \cdot m + W \cdot l)^2 \right]} = 0$$

4RST6AB6R5



$N_1 = 0.64635$ $N_3 = 2.58824$ $N_5 = 1.66595$ $N_7 = 1.06544$

$N_2 = 2.03142$ $N_4 = 2.42122$ $N_6 = 3.17694$ $N_8 = 4.84868$ $R = 1.29081$

Unit. $AB := 1$ **Given.** $N_1 := .64635$ $N_2 := 2.03142$ $N_3 := 2.58824$ $N_4 := 2.42122$ $N_5 := 1.66595$ $N_6 := 3.17694$ $N_7 := 1.06544$ $N_8 := 4.84868$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

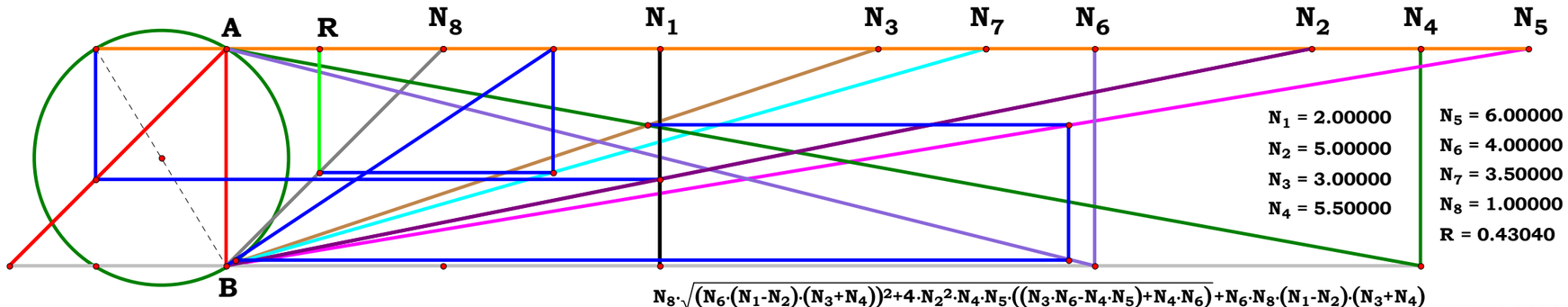
$ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$ $GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{(GJ - AF)}{PT}$

$KO := \frac{N_7 - AK}{N_7}$ $R := N_8 \cdot (AB - KO)$ $R = 1.290805$



$N_1 = 2.00000$ $N_5 = 6.00000$

$N_2 = 5.00000$ $N_6 = 4.00000$

$N_3 = 3.00000$ $N_7 = 3.50000$

$N_4 = 5.50000$ $N_8 = 1.00000$

$R = 0.43040$

$$\frac{N_8 \cdot \sqrt{(N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4))^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} + N_6 \cdot N_8 \cdot (N_1 - N_2) \cdot (N_3 + N_4)}{2 \cdot N_2 \cdot N_7 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)} - R = 0.00000$$

Definitions.

$$R - \frac{N_8 \cdot \left[\sqrt{N_6^2 \cdot (N_3 + N_4)^2 \cdot (N_1 - N_2)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} + N_6 \cdot (N_3 + N_4) \cdot (N_1 - N_2)\right]}{2 \cdot N_2 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

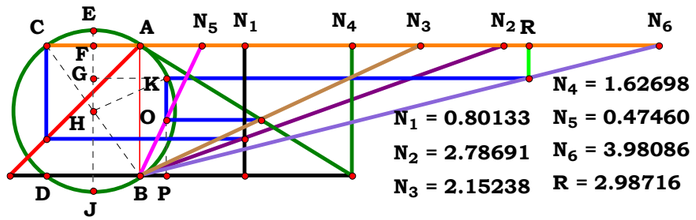
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$$R - \frac{G \cdot \left[\sqrt{E^2 \cdot (C + D)^2 \cdot (A - B)^2 + 4 \cdot E \cdot A^2 \cdot C \cdot F \cdot (C + D)} - 4 \cdot A^2 \cdot C^2 \cdot F^2 - E \cdot (C + D) \cdot (A - B)\right]}{2 \cdot A \cdot H \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{N_8 \cdot \left[\sqrt{N_6^2 \cdot (N_3 + N_4)^2 \cdot (N_1 - N_2)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} + N_6 \cdot (N_3 + N_4) \cdot (N_1 - N_2)\right]}{2 \cdot N_2 \cdot N_7 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} = 0$$

4RST6AB6R6



Unit. $AB := 1$ Given. $N_1 := .80133$ $N_2 := 2.78691$ $N_3 := 2.15238$

$N_4 := 1.62698$ $N_5 := .47460$ $N_6 := 3.98086$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

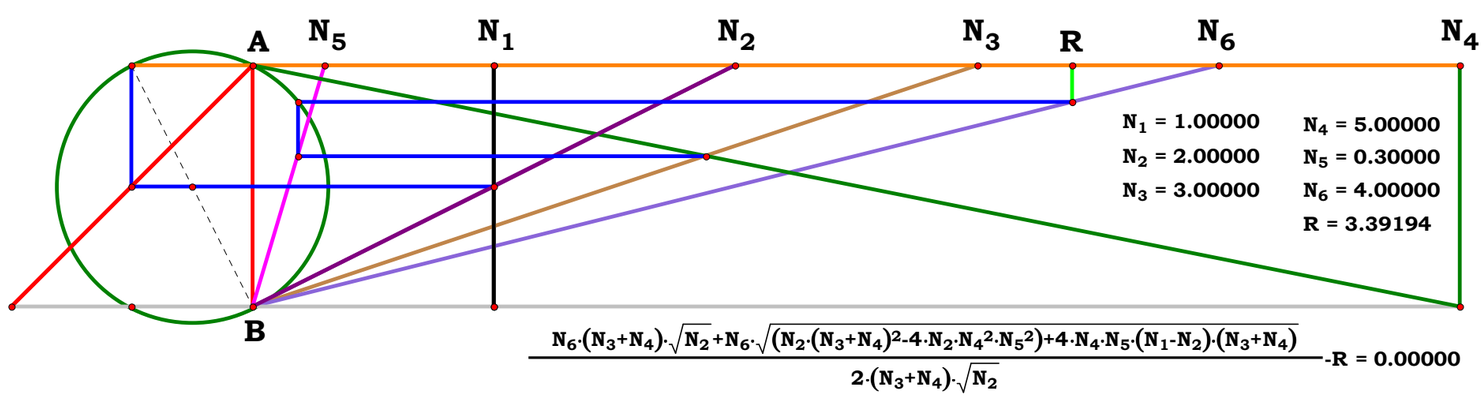
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$

$GH := \sqrt{HK^2 - GK^2}$ $KP := GH + HK - EF$

$R := N_6 \cdot KP$ $R = 2.987175$



$$\frac{N_6\cdot(N_3+N_4)\cdot\sqrt{N_2}+N_6\cdot\sqrt{(N_2\cdot(N_3+N_4)^2-4\cdot N_2\cdot N_4^2\cdot N_5^2)+4\cdot N_4\cdot N_5\cdot(N_1-N_2)\cdot(N_3+N_4)}}{2\cdot(N_3+N_4)\cdot\sqrt{N_2}} - R = 0.00000$$

Definitions.

$$R - \frac{N_6\cdot\left[\sqrt{N_2}\cdot(N_3+N_4)+\sqrt{N_2\cdot(N_3+N_4)^2-4\cdot N_2\cdot N_4^2\cdot N_5^2+4\cdot N_4\cdot N_5\cdot(N_3+N_4)\cdot(N_1-N_2)}\right]}{2\cdot\sqrt{N_2}\cdot(N_3+N_4)} = 0$$

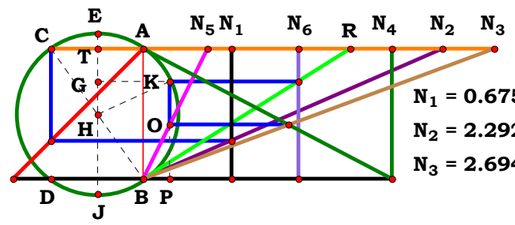
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{\sqrt{N_u}\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{Z\cdot\left[\sqrt{4\cdot Y\cdot X\cdot m\cdot o\cdot(W\cdot n+X\cdot m)\cdot(U\cdot l-V\cdot k)-4\cdot V\cdot X^2\cdot k\cdot m^2\cdot Y^2+V\cdot k\cdot o^2\cdot(W\cdot n+X\cdot m)^2}\cdot\sqrt{l}+\sqrt{k\cdot l}\cdot\sqrt{V}\cdot o\cdot(W\cdot n+X\cdot m)\right]}{2\cdot\sqrt{V}\cdot o\cdot p\cdot(W\cdot n+X\cdot m)\cdot\sqrt{k\cdot l}} = 0$$

4RST6AB6R7



$N_1 = 0.67541$ $N_2 = 2.29294$ $N_3 = 2.69478$ $N_4 = 1.90787$ $N_5 = 0.49397$ $N_6 = 1.19135$ $R = 1.58373$

Unit. $AB := 1$ Given. $N_1 := .67541$ $N_2 := 2.29294$ $N_3 := 2.69478$ $N_4 := 1.90787$ $N_5 := .49397$ $N_6 := 1.19135$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

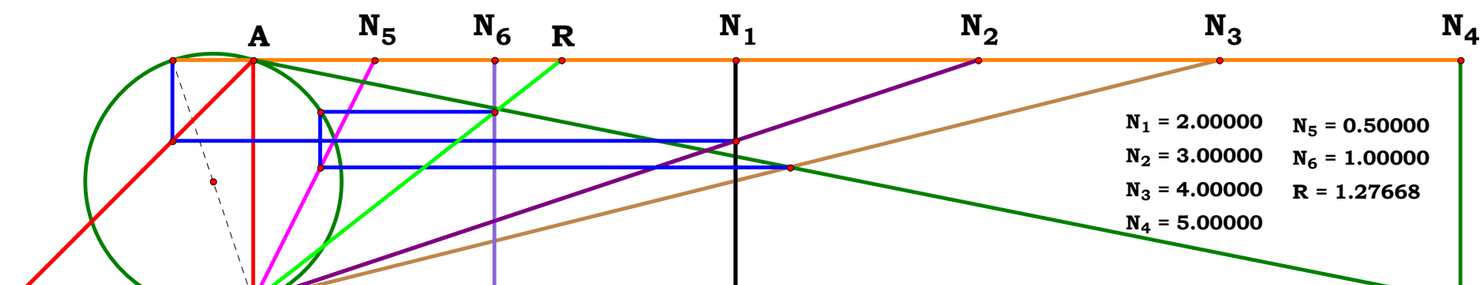
Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $HK := \frac{EJ}{2}$ $OP := \frac{N_4}{N_3 + N_4}$

$BP := N_5 \cdot OP$ $GK := AF + BP$ $GH := \sqrt{HK^2 - GK^2}$

$KP := GH + HK - EF$ $R := \frac{N_6}{KP}$ $R = 1.583718$



$N_1 = 2.00000$ $N_2 = 3.00000$ $N_3 = 4.00000$ $N_4 = 5.00000$ $N_5 = 0.50000$ $N_6 = 1.00000$ $R = 1.27668$

B

$$\frac{2 \cdot N_6 \cdot (N_3+N_4) \cdot \sqrt{N_2}}{(N_3+N_4) \cdot \sqrt{N_2} + \sqrt{(N_2 \cdot (N_3+N_4)^2 - 4 \cdot N_2 \cdot N_4^2 \cdot N_5^2) + 4 \cdot N_4 \cdot N_5 \cdot (N_1 - N_2) \cdot (N_3+N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_6 \cdot (N_3 + N_4)}{\sqrt{N_2} \cdot (N_3 + N_4) + \sqrt{N_2 \cdot (N_3 + N_4)^2 - 4 \cdot N_2 \cdot N_4^2 \cdot N_5^2 + 4 \cdot N_4 \cdot N_5 \cdot (N_3 + N_4) \cdot (N_1 - N_2)}} = 0$$

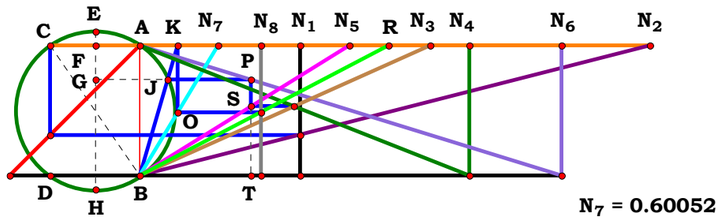
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^3 \cdot (C + D) \cdot \sqrt{A \cdot B} \cdot E}{F \cdot \left[\sqrt{B} \cdot \sqrt{N_u} \cdot \left[E \cdot \left[A \cdot E \cdot (C + D) - 4 \cdot C \cdot N_u \cdot (A - B)\right] \cdot (C + D) - 4 \cdot A \cdot C^2 \cdot N_u^2\right] + \sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot E \cdot (C + D)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{V} \cdot Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot \sqrt{k \cdot l}}{p \cdot \left[\sqrt{4 \cdot Y \cdot X \cdot m \cdot o \cdot (W \cdot n + X \cdot m) \cdot (U \cdot l - V \cdot k) - 4 \cdot V \cdot X^2 \cdot k \cdot m^2 \cdot Y^2 + V \cdot k \cdot o^2 \cdot (W \cdot n + X \cdot m)^2} \cdot \sqrt{l} + \sqrt{k \cdot l} \cdot \sqrt{V} \cdot o \cdot (W \cdot n + X \cdot m)\right]} = 0$$

4RST6AB6R8



$N_7 = 0.60052$

$N_1 = 1.22750$ $N_3 = 2.22987$ $N_5 = 1.60784$ $N_8 = 0.92838$

$N_2 = 3.91046$ $N_4 = 2.52776$ $N_6 = 3.23505$ $R = 1.90359$

Unit. $AB := 1$ **Given.** $N_1 := 1.22750$ $N_2 := 3.91046$ $N_3 := 2.22987$ $N_4 := 2.52776$

$N_5 := 1.60784$ $N_6 := 3.23505$ $N_7 := .60052$ $N_8 := .92838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$S := 20$ $T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$h := \frac{S}{N_1}$ $j := \frac{T}{N_2}$ $k := \frac{Y}{N_3}$ $l := \frac{V}{N_4}$ $m := \frac{W}{N_5}$ $n := \frac{X}{N_6}$ $o := \frac{Y}{N_7}$ $p := \frac{Z}{N_8}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

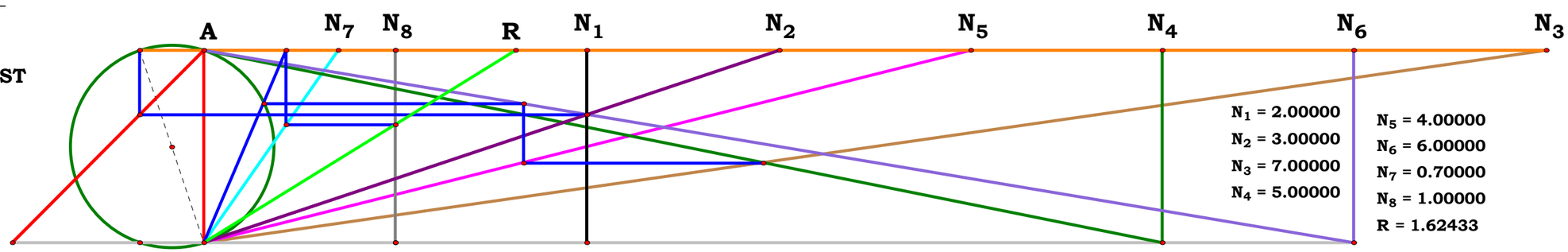
$ST := \frac{N_4}{N_3 + N_4}$ $BT := N_5 \cdot ST$

$PT := \frac{N_6 - BT}{N_6}$

$GH := PT + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$AK := \frac{GJ - AF}{PT}$ $KO := \frac{N_7 - AK}{N_7}$ $R := \frac{N_8}{AB - KO}$ $R = 1.903602$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 7.00000$
$N_4 = 5.00000$

$N_5 = 4.00000$
$N_6 = 6.00000$
$N_7 = 0.70000$
$N_8 = 1.00000$
$R = 1.62433$

B

$$\frac{2 \cdot N_2 \cdot N_7 \cdot N_8 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}{N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4) + \sqrt{(N_6 \cdot (N_1 - N_2) \cdot (N_3 + N_4))^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot ((N_3 \cdot N_6 - N_4 \cdot N_5) + N_4 \cdot N_6)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_7 \cdot N_8 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)}{\sqrt{N_6^2 \cdot (N_3 + N_4)^2 \cdot (N_1 - N_2)^2 + 4 \cdot N_2^2 \cdot N_4 \cdot N_5 \cdot (N_3 \cdot N_6 - N_4 \cdot N_5 + N_4 \cdot N_6)} + N_6 \cdot (N_3 + N_4) \cdot (N_1 - N_2)} = 0$$

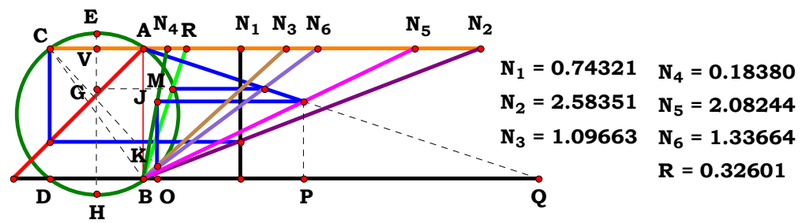
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$ $N_8 - \frac{N_u}{H} = 0$

$N_1 - \frac{S}{h} = 0$ $N_2 - \frac{T}{j} = 0$ $N_3 - \frac{U}{k} = 0$ $N_4 - \frac{V}{l} = 0$ $N_5 - \frac{W}{m} = 0$ $N_6 - \frac{X}{n} = 0$ $N_7 - \frac{Y}{o} = 0$ $N_8 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot A \cdot N_u^2 \cdot (C \cdot E - C \cdot F + D \cdot E)}{\left[G \cdot H \cdot \left[\sqrt{E^2 \cdot (C + D)^2 \cdot (A - B)^2 + 4 \cdot A^2 \cdot C \cdot F \cdot [C \cdot (E - F) + D \cdot E]} - E \cdot (C + D) \cdot (A - B)\right]\right]} = 0$$

$$R - \frac{2 \cdot T \cdot Y \cdot Z \cdot h \cdot (U \cdot X \cdot l \cdot m - V \cdot W \cdot k \cdot n + V \cdot X \cdot k \cdot m)}{o \cdot p \cdot \left[\sqrt{X^2 \cdot m^2 \cdot (U \cdot l + V \cdot k)^2 \cdot (S \cdot j - T \cdot h)^2 + 4 \cdot X \cdot T^2 \cdot V \cdot W \cdot h^2 \cdot k \cdot m \cdot n \cdot (U \cdot l + V \cdot k) - 4 \cdot T^2 \cdot V^2 \cdot W^2 \cdot h^2 \cdot k^2 \cdot n^2} - X \cdot m \cdot (U \cdot l + V \cdot k) \cdot (T \cdot h - S \cdot j)\right]} = 0$$

4RST6AB6R9



$N_1 = 0.74321$ $N_4 = 0.18380$
$N_2 = 2.58351$ $N_5 = 2.08244$
$N_3 = 1.09663$ $N_6 = 1.33664$
$R = 0.32601$

Unit. $AB := 1$ **Given.** $N_1 := .74321$ $N_2 := 2.58351$ $N_3 := 1.09663$ $N_4 := .18380$ $N_5 := 2.08244$ $N_6 := 1.33664$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

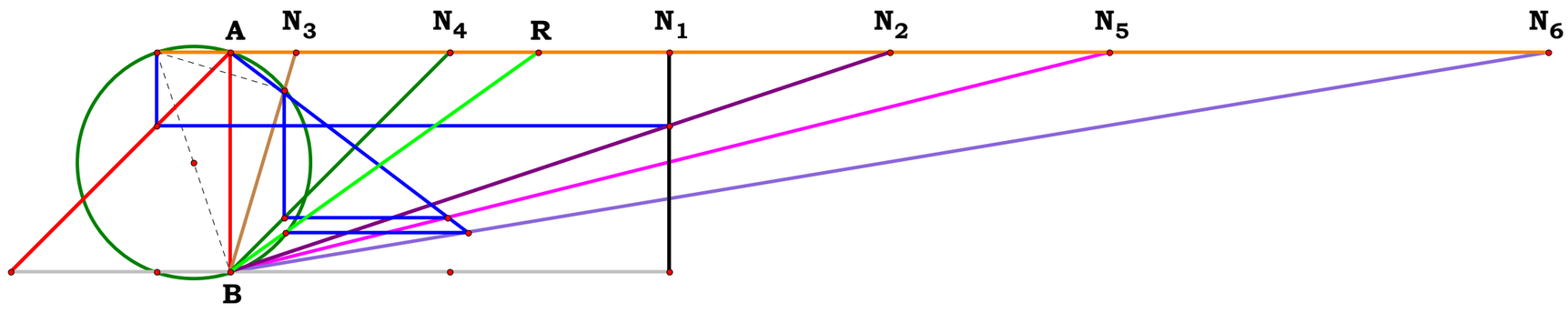
$$BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.32601$$

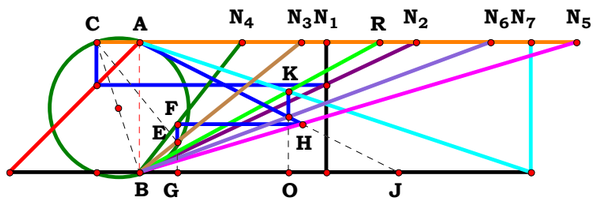


$N_1 = 2.00000$ $N_4 = 1.00000$ $AB = 1.00000$ $EF = 0.02705$ $BO = 0.24771$ $FG = 0.82000$
$N_2 = 3.00000$ $N_5 = 4.00000$ $AC = 0.33333$ $BN_3 = 1.04403$ $JO = 0.24771$ $EG = 0.84705$
$N_3 = 0.30000$ $N_6 = 6.00000$ $EH = 1.05409$ $CN_3 = 0.63333$ $BP = 0.99083$ $GM = 0.41878$
$R = 1.40064$ $AF = 0.16667$ $KN_3 = 0.18199$ $BQ = 1.31707$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_6^2 \cdot (N_1 - N_2)^2 \cdot \left[N_3^2 \cdot (N_1 - N_2 - N_2 \cdot N_4) + N_2 \cdot (N_3 - N_4)\right]^2 + N_3^2 \cdot N_5^2 \cdot (N_1 - N_2)^2 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)^2 \ \ldots \ \ldots}{+ \ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(N_1^2 - 2 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2\right) \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3) \cdot \left[N_3^2 \cdot (N_1 - N_2 - N_2 \cdot N_4) + N_2 \cdot (N_3 - N_4)\right]}$$
$$+ \ (N_1 - N_2) \cdot \left[(N_1 - N_2) \cdot (N_5 - N_6) \cdot N_3^2 + N_2 \cdot \left[N_6 \cdot \left(N_3^2 \cdot N_4 - N_3 + N_4\right) + N_3 \cdot N_5\right]\right]$$
$$2 \cdot N_2 \cdot N_3 \cdot N_5 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)$$
$$= 0$$

4RST6AB6R10



$N_1 = 1.43090$ $N_3 = 1.24192$ $N_5 = 3.35128$ $N_7 = 3.00259$

$N_2 = 2.11859$ $N_4 = 0.78432$ $N_6 = 2.69265$ $R = 1.84291$

Unit. $AB := 1$ **Given.** $N_1 := 1.43090$ $N_2 := 2.11859$ $N_3 := 1.24192$ $N_4 := .78432$

$N_5 := 3.35128$ $N_6 := 2.69265$ $N_7 := 3.00259$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$T := 19$ $U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$j := \frac{T}{N_1}$ $k := \frac{U}{N_2}$ $l := \frac{V}{N_3}$ $m := \frac{W}{N_4}$ $n := \frac{X}{N_5}$ $o := \frac{Y}{N_6}$ $p := \frac{Z}{N_7}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

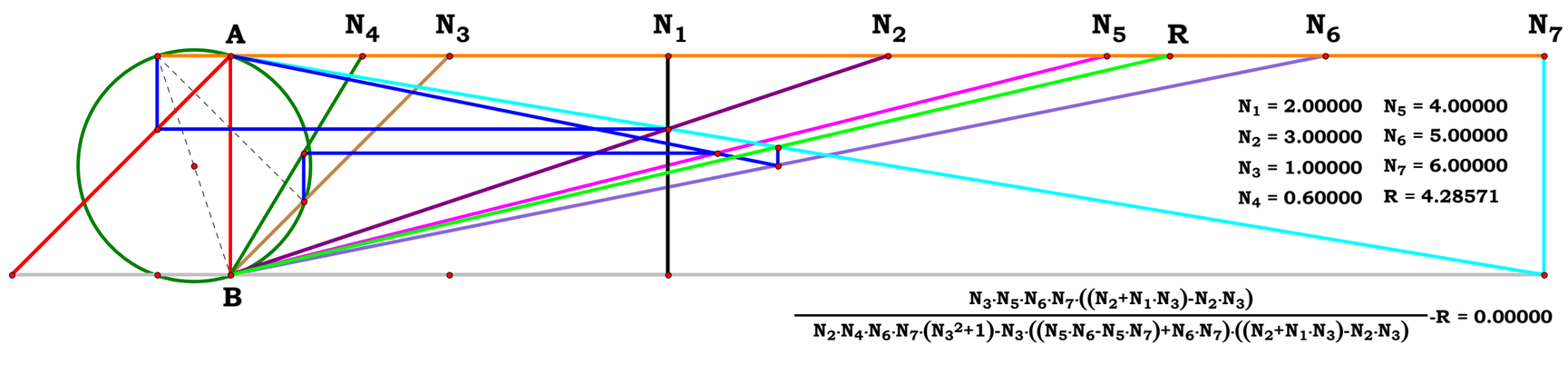
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$FH := N_5 \cdot FG$ $BJ := \frac{FH}{(AB - FG)}$

$BO := \frac{N_6 \cdot BJ}{N_6 + BJ}$ $KO := \frac{N_7 - BO}{N_7}$

$R := \frac{BO}{KO}$ $R = 1.842898$



$N_1 = 2.00000$ $N_5 = 4.00000$

$N_2 = 3.00000$ $N_6 = 5.00000$

$N_3 = 1.00000$ $N_7 = 6.00000$

$N_4 = 0.60000$ $R = 4.28571$

$$\frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{N_2 \cdot N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) - N_3 \cdot ((N_5 \cdot N_6 - N_5 \cdot N_7) + N_6 \cdot N_7) \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_5 \cdot N_6 \cdot N_7 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)}{N_2 \cdot N_4 \cdot N_6 \cdot N_7 \cdot (N_3^2 + 1) - N_3 \cdot (N_5 \cdot N_6 - N_5 \cdot N_7 + N_6 \cdot N_7) \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

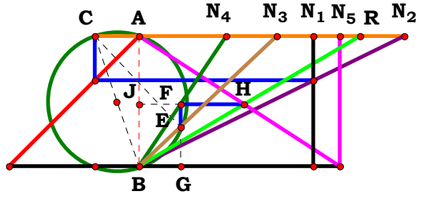
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$ $N_7 - \frac{N_u}{G} = 0$

$$R - \frac{D \cdot N_u \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)}{E \cdot [A \cdot N_u^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)} = 0$$

$N_1 - \frac{T}{j} = 0$ $N_2 - \frac{U}{k} = 0$ $N_3 - \frac{V}{l} = 0$ $N_4 - \frac{W}{m} = 0$ $N_5 - \frac{X}{n} = 0$ $N_6 - \frac{Y}{o} = 0$ $N_7 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot X \cdot Y \cdot Z \cdot m \cdot (T \cdot V \cdot k - U \cdot V \cdot j + U \cdot j \cdot l)}{W \cdot U \cdot Y \cdot Z \cdot j \cdot n \cdot (V^2 + l^2) - V \cdot m \cdot (X \cdot Y \cdot p - X \cdot Z \cdot o + Y \cdot Z \cdot n) \cdot (T \cdot V \cdot k - U \cdot V \cdot j + U \cdot j \cdot l)} = 0$$

4RST6AB6R11



$N_1 = 1.33405$
$N_2 = 2.03142$
$N_3 = 1.05789$
$N_4 = 0.66809$
$N_5 = 1.54004$
$R = 1.69633$

Unit. $AB := 1$ **Given.** $N_1 := 1.33405$ $N_2 := 2.03142$ $N_3 := 1.05789$

$N_4 := .66809$ $N_5 := 1.54004$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

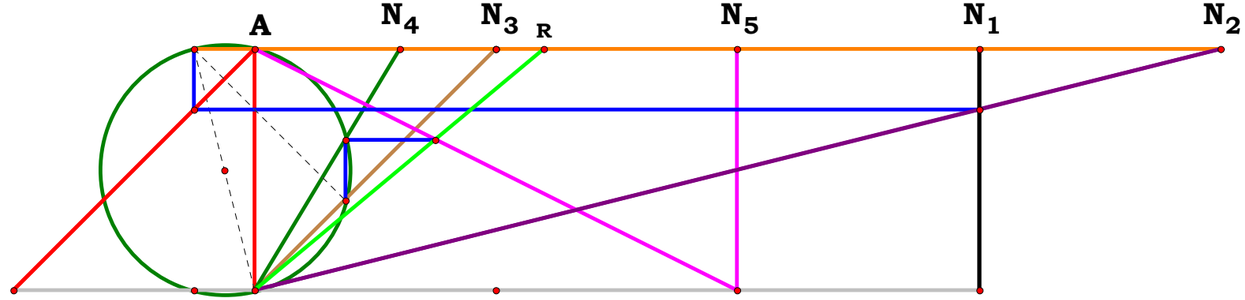
$$AC := \frac{N_2 - N_1}{N_2} \qquad BN_3 := \sqrt{N_3^2 + AB^2}$$

$$CN_3 := N_3 + AC \qquad EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

$$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3} \qquad FG := \frac{BG}{N_4}$$

$$HJ := N_5 \cdot (AB - FG) \qquad R := \frac{HJ}{FG}$$

$R = 1.696324$



Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) - N_3 \cdot N_5 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)}{N_3 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0 \quad N_5 - \frac{N_u}{E} = 0$$

$$R - \frac{N_u \cdot [A \cdot C^2 + A \cdot N_u^2 - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)]}{A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)} = 0$$

$$N_1 - \frac{V}{l} = 0 \quad N_2 - \frac{W}{m} = 0 \quad N_3 - \frac{X}{n} = 0 \quad N_4 - \frac{Y}{o} = 0 \quad N_5 - \frac{Z}{p} = 0$$

$$R - \frac{Z \cdot [Y \cdot W \cdot l \cdot (X^2 + n^2) - X \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)]}{X \cdot o \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

B

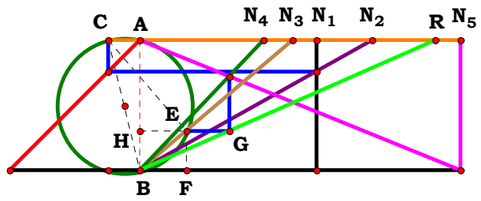
$N_1 = 3.00000$ $N_4 = 0.60000$

$N_2 = 4.00000$ $N_5 = 2.00000$

$N_3 = 1.00000$ $R = 1.20000$

$$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1) - N_3 \cdot N_5 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)}{N_3 \cdot ((N_2 + N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$$

4RST6AB6R12



$N_1 = 1.35342$
$N_2 = 1.77959$
$N_3 = 1.17412$
$N_4 = 0.94898$
$N_5 = 2.46019$
$R = 2.26603$

Unit. $AB := 1$ **Given.** $N_1 := 1.35342$ $N_2 := 1.77959$ $N_3 := 1.17412$

$N_4 := .94898$ $N_5 := 2.46019$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{(BN_3 - EN_3)}{BN_3}$ $HG := \frac{N_5 \cdot N_4}{N_5 + N_4}$

$R := \frac{HG}{EF}$ $R = 2.266037$

Definitions.

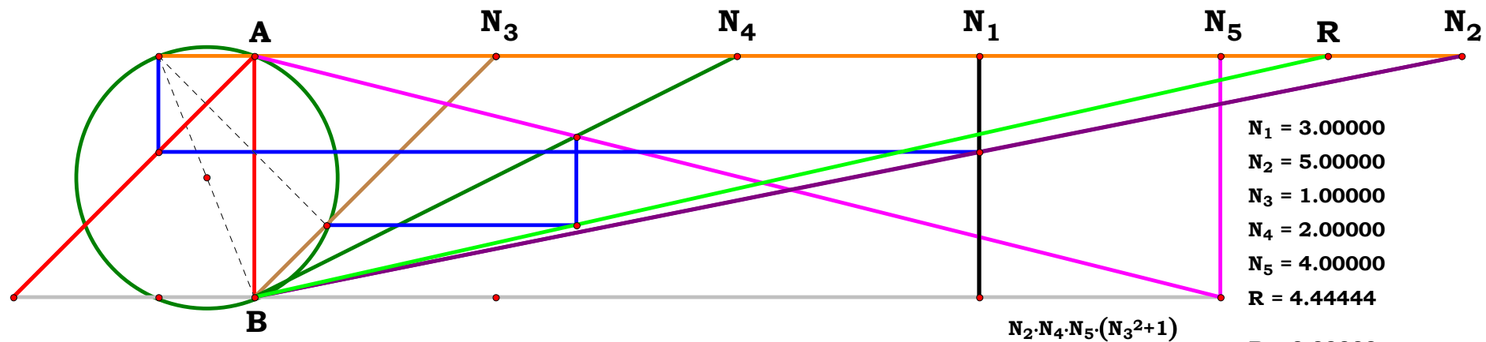
$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2 + 1)}{(N_4 + N_5) \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{A \cdot N_u \cdot (C^2 + N_u^2)}{C \cdot (D + E) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

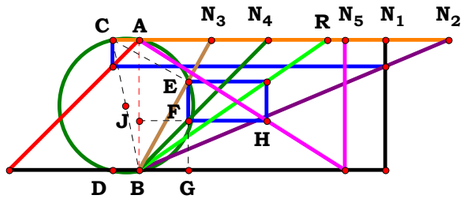
$$R - \frac{W \cdot Y \cdot Z \cdot l \cdot (X^2 + n^2)}{n \cdot (Y \cdot p + Z \cdot o) \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$



$N_1 = 3.00000$
$N_2 = 5.00000$
$N_3 = 1.00000$
$N_4 = 2.00000$
$N_5 = 4.00000$
$R = 4.44444$

$\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1)}{(N_4+N_5) \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$

4RST6AB6R13



$N_1 = 1.88613$
$N_2 = 2.37042$
$N_3 = 0.55423$
$N_4 = 0.98772$
$N_5 = 1.57878$
$R = 1.44137$

Unit. $AB := 1$ **Given.** $N_1 := 1.88613$ $N_2 := 2.37042$ $N_3 := .55423$ $N_4 := .98772$ $N_5 := 1.57878$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$l := \frac{V}{N_1}$ $m := \frac{W}{N_2}$ $n := \frac{X}{N_3}$ $o := \frac{Y}{N_4}$ $p := \frac{Z}{N_5}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

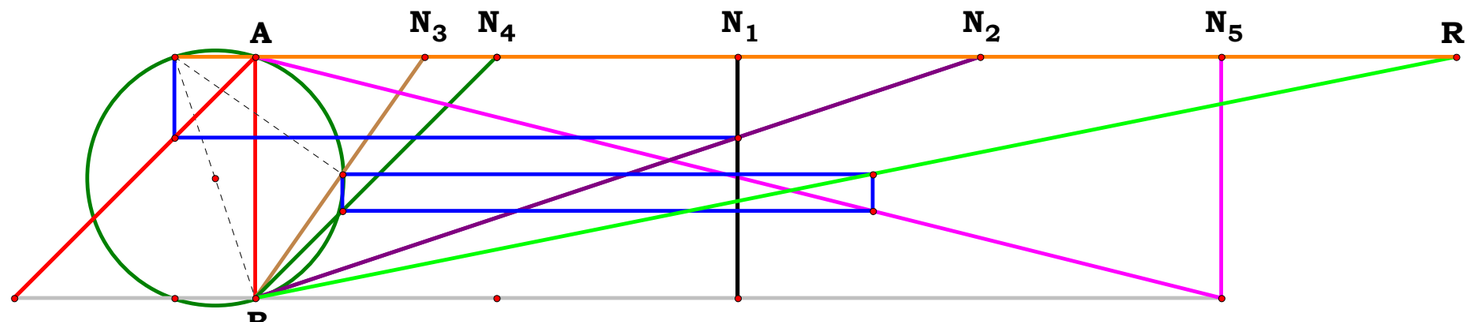
$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BG := \frac{N_3 \cdot (BN_3 - EN_3)}{BN_3}$ $FG := \frac{BG}{N_4}$

$JH := N_5 \cdot (AB - FG)$

$EG := \frac{BN_3 - EN_3}{BN_3}$

$R := \frac{JH}{EG}$ $R = 1.44137$



$N_1 = 2.00000$ $N_4 = 1.00000$ $\frac{N_2 \cdot N_4 \cdot N_5 \cdot (N_3^2+1) - N_3 \cdot N_5 \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3)}{N_4 \cdot ((N_2+N_1 \cdot N_3) - N_2 \cdot N_3)} - R = 0.00000$

$N_2 = 3.00000$ $N_5 = 4.00000$

$N_3 = 0.70000$ $R = 4.97391$

Definitions.

$$R - \frac{N_2 \cdot N_4 \cdot N_5 \cdot \left(N_3^2 + 1\right) - N_3 \cdot N_5 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)}{N_4 \cdot \left(N_2 + N_1 \cdot N_3 - N_2 \cdot N_3\right)} = 0$$

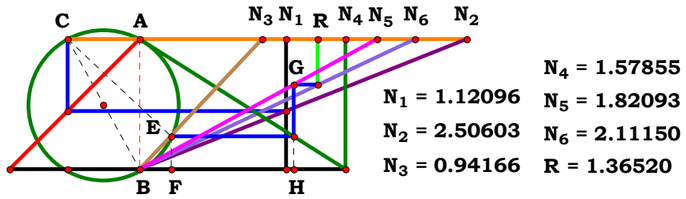
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$

$$R - \frac{N_u \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u^2\right) + D \cdot N_u \cdot (A - B)\right]}{A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)} = 0$$

$N_1 - \frac{V}{l} = 0$ $N_2 - \frac{W}{m} = 0$ $N_3 - \frac{X}{n} = 0$ $N_4 - \frac{Y}{o} = 0$ $N_5 - \frac{Z}{p} = 0$

$$R - \frac{Z \cdot \left[Y \cdot W \cdot l \cdot \left(X^2 + n^2\right) - X \cdot o \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)\right]}{Y \cdot n \cdot p \cdot (V \cdot X \cdot m - W \cdot X \cdot l + W \cdot l \cdot n)} = 0$$

4RST6AB6R14



$N_1 = 1.12096$ $N_4 = 1.57855$
$N_2 = 2.50603$ $N_5 = 1.82093$
$N_3 = 0.94166$ $N_6 = 2.11150$
$R = 1.36520$

Unit. $AB := 1$ **Given.** $N_1 := 1.12096$ $N_2 := 2.50603$ $N_3 := .94166$

$N_4 := 1.57855$ $N_5 := 1.82093$ $N_6 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

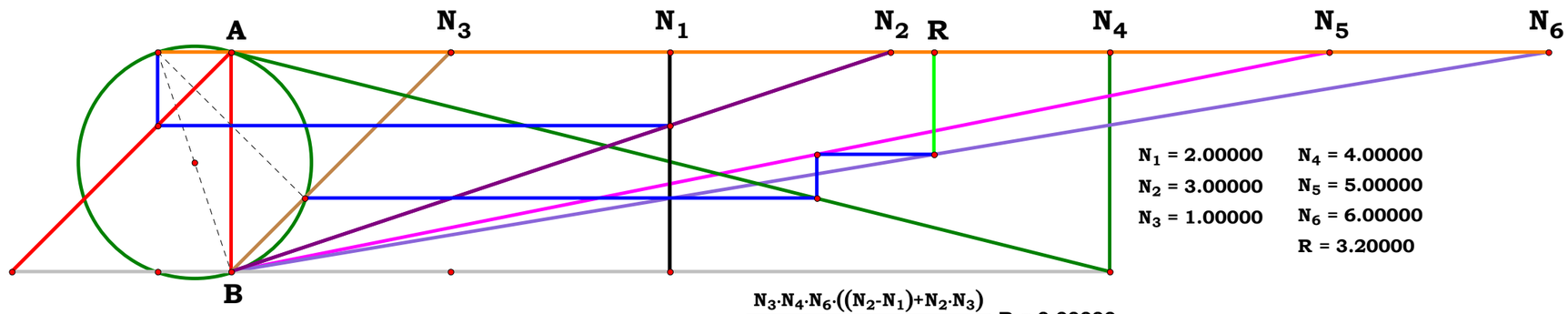
$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$EF := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - EF)$

$GH := \frac{BH}{N_5}$ $R := N_6 \cdot GH$

$R = 1.365198$



$N_1 = 2.00000$ $N_4 = 4.00000$
$N_2 = 3.00000$ $N_5 = 5.00000$
$N_3 = 1.00000$ $N_6 = 6.00000$
$R = 3.20000$

$\frac{N_3 \cdot N_4 \cdot N_6 \cdot ((N_2 - N_1) + N_2 \cdot N_3)}{N_2 \cdot N_5 \cdot (N_3^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot N_6 \cdot \left(N_2 - N_1 + N_2 \cdot N_3\right)}{N_2 \cdot N_5 \cdot \left(N_3^2 + 1\right)} = 0$$

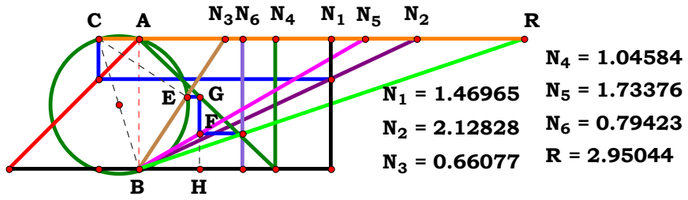
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{E \cdot N_u^2 \cdot \left[C \cdot (A - B) + A \cdot N_u\right]}{F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^2\right)\right]} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot (V \cdot W \cdot k - U \cdot l \cdot m + V \cdot k \cdot m)}{p \cdot \left(V \cdot Y \cdot k \cdot n \cdot W^2 + V \cdot Y \cdot k \cdot n \cdot m^2\right)} = 0$$

4RST6AB6R15



Unit. $AB := 1$ Given. $N_1 := 1.46965$ $N_2 := 2.12828$ $N_3 := .66077$

$N_4 := 1.04584$ $N_5 := 1.73376$ $N_6 := .79423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

$U := 18$ $V := 17$ $W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$k := \frac{U}{N_1}$ $l := \frac{V}{N_2}$ $m := \frac{W}{N_3}$ $n := \frac{X}{N_4}$ $o := \frac{Y}{N_5}$ $p := \frac{Z}{N_6}$

Descriptions.

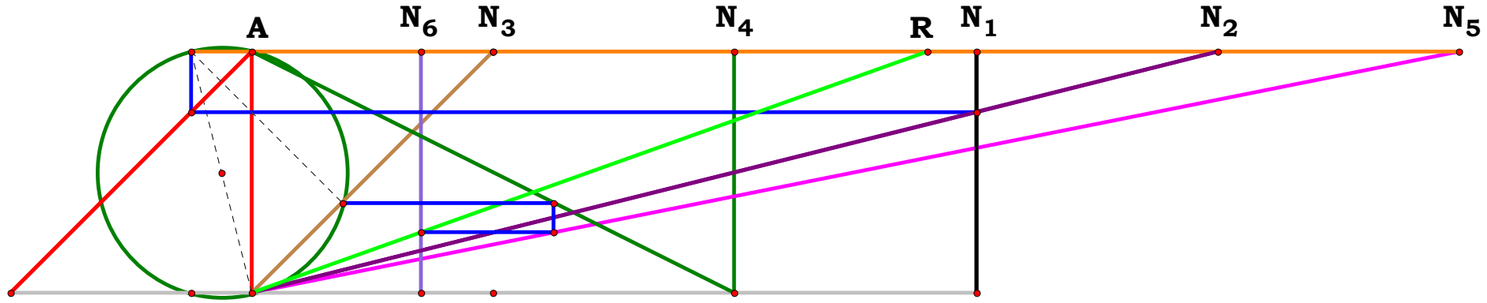
$AC := \frac{N_2 - N_1}{N_2}$ $BN_3 := \sqrt{N_3^2 + AB^2}$

$CN_3 := N_3 + AC$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$GH := \frac{BN_3 - EN_3}{BN_3}$ $BH := N_4 \cdot (AB - GH)$

$FH := \frac{BH}{N_5}$ $R := \frac{N_6}{FH}$

$R = 2.950417$



Definitions.

$$R - \frac{N_2 \cdot N_5 \cdot N_6 \cdot \left(N_3^2 + 1\right)}{N_3 \cdot N_4 \cdot \left(N_2 - N_1 + N_2 \cdot N_3\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$ $N_5 - \frac{N_u}{E} = 0$ $N_6 - \frac{N_u}{F} = 0$

$$R - \frac{A \cdot D \cdot \left(C^2 + N_u^2\right)}{A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)} = 0$$

$N_1 - \frac{U}{k} = 0$ $N_2 - \frac{V}{l} = 0$ $N_3 - \frac{W}{m} = 0$ $N_4 - \frac{X}{n} = 0$ $N_5 - \frac{Y}{o} = 0$ $N_6 - \frac{Z}{p} = 0$

$$R - \frac{V \cdot Y \cdot Z \cdot k \cdot n \cdot \left(W^2 + m^2\right)}{o \cdot p \cdot W \cdot X \cdot (V \cdot W \cdot k - U \cdot l \cdot m + V \cdot k \cdot m)} = 0$$

B

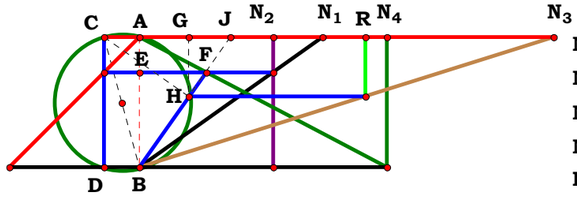
$N_1 = 3.00000$ $N_4 = 2.00000$ $\frac{N_2 \cdot N_5 \cdot N_6 \cdot (N_3^2+1)}{N_3 \cdot N_4 \cdot ((N_2-N_1)+N_2 \cdot N_3)} - R = 0.00000$

$N_2 = 4.00000$ $N_5 = 5.00000$

$N_3 = 1.00000$ $N_6 = 0.70000$

$R = 2.80000$

4RST7AB1R0



$N_1 = 1.40185$
$N_2 = 1.02410$
$N_3 = 3.17907$
$N_4 = 1.89818$
$R = 1.73081$

Unit. $AB := 1$ **Given.** $N_1 := 1.40185$ $N_2 := 1.02410$ $N_3 := 3.17907$

$N_4 := 1.89818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$ $EF := N_4 \cdot AE$ $AJ := \frac{EF}{AB - AE}$

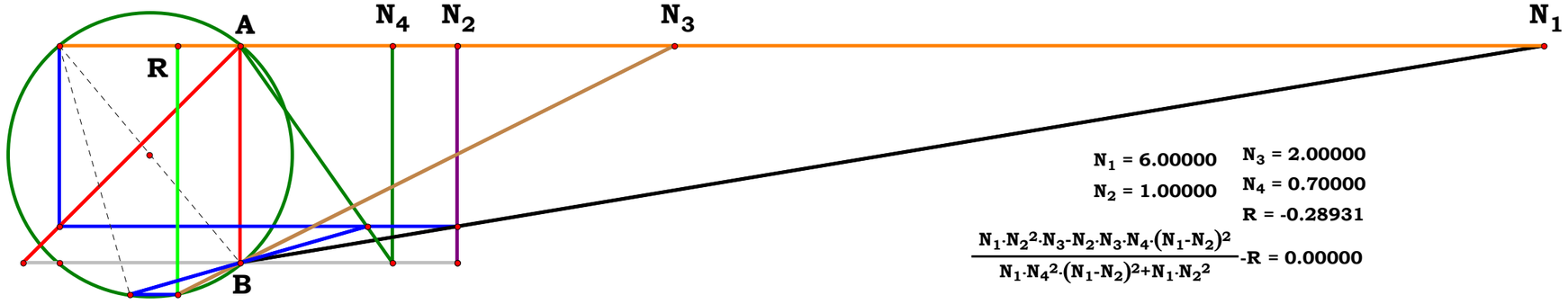
$BJ := \sqrt{AB^2 + AJ^2}$ $HJ := \frac{AJ + AC}{BJ}$

$HG := \frac{AJ \cdot HJ}{BJ}$ $R := N_3 \cdot (AB - HG)$

$R = 1.730791$

Definitions.

This template has two opening variables.



$N_1 = 6.00000$ $N_3 = 2.00000$

$N_2 = 1.00000$ $N_4 = 0.70000$

$R = -0.28931$

$\frac{N_1 \cdot N_2^2 \cdot N_3 - N_2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_2)^2}{N_1 \cdot N_4^2 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^2} - R = 0.00000$

$$R - \frac{N_3 \cdot (AE - 1) \cdot \left(AE + AC \cdot AE \cdot N_4 - 1\right)}{AE^2 \cdot N_4^2 + AE^2 - 2 \cdot AE + 1} = 0$$

$$R - \frac{N_1 \cdot N_2^2 \cdot N_3 - N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1 - N_2\right)^2}{N_1 \cdot N_4^2 \cdot \left(N_1 - N_2\right)^2 + N_1 \cdot N_2^2} = 0$$

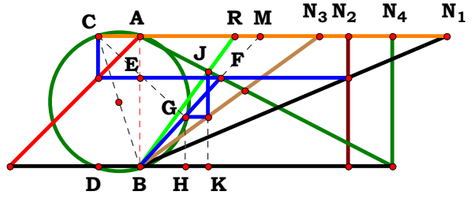
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right]}{B \cdot C \cdot \left[A^2 \cdot \left(D^2 + N_u^2\right) - B \cdot N_u^2 \cdot (2 \cdot A - B)\right]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{X \cdot Y \cdot m \cdot p \cdot \left[W \cdot X \cdot m \cdot n \cdot p - Z \cdot (W \cdot n - X \cdot m)^2\right]}{W \cdot n \cdot o \cdot \left[Z^2 \cdot (W \cdot n - X \cdot m)^2 + X^2 \cdot m^2 \cdot p^2\right]} = 0$$

4RST7AB1R1



$N_1 = 2.35105$
$N_2 = 1.59556$
$N_3 = 1.37752$
$N_4 = 1.93693$
$R = 0.72529$

Unit. $AB := 1$ Given. $N_1 := 2.35105$ $N_2 := 1.59556$ $N_3 := 1.37752$

$N_4 := 1.93693$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

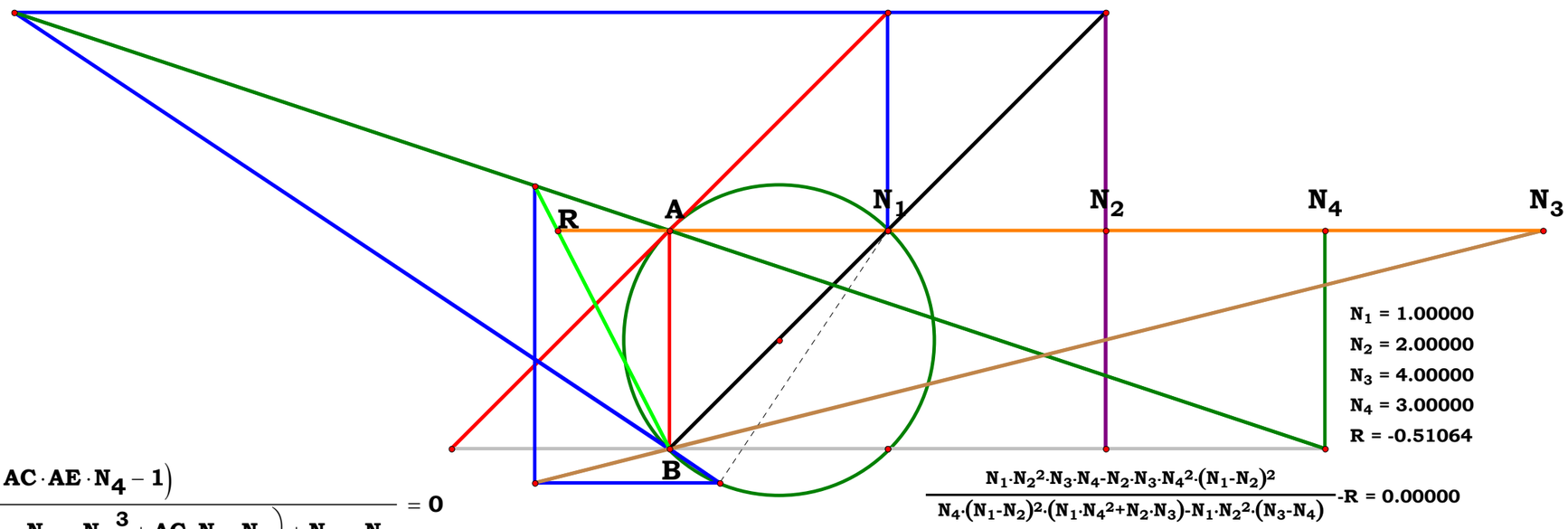
$AC := \frac{N_1 - N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$

$EF := N_4 \cdot AE$ $AM := \frac{EF}{AB - AE}$

$BM := \sqrt{AM^2 + AB^2}$ $FM := \frac{AM \cdot (AM + AC)}{BM}$

$BG := BM - FM$ $GH := \frac{BG}{BM}$ $BK := N_3 \cdot GH$

$JK := \frac{N_4 - BK}{N_4}$ $R := \frac{BK}{JK}$ $R = 0.725292$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = -0.51064$

$\frac{N_1 \cdot N_2^2 \cdot N_3 \cdot N_4 - N_2 \cdot N_3 \cdot N_4^2 \cdot (N_1 - N_2)^2}{N_4 \cdot (N_1 - N_2)^2 \cdot (N_1 \cdot N_4^2 + N_2 \cdot N_3) - N_1 \cdot N_2^2 \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (AE - 1) \cdot \left(AE + AC \cdot AE \cdot N_4 - 1\right)}{AE \cdot \left(2 \cdot N_3 - 2 \cdot N_4 + AC \cdot N_3 \cdot N_4\right) - AE^2 \cdot \left(N_3 - N_4 - N_4^3 + AC \cdot N_3 \cdot N_4\right) + N_4 - N_3} = 0$$

$$R - \frac{N_1 \cdot N_2^2 \cdot N_3 \cdot N_4 - N_2 \cdot N_3 \cdot N_4^2 \cdot (N_1 - N_2)^2}{N_4 \cdot (N_1 - N_2)^2 \cdot \left(N_1 \cdot N_4^2 + N_2 \cdot N_3\right) - N_1 \cdot N_2^2 \cdot (N_3 - N_4)} = 0$$

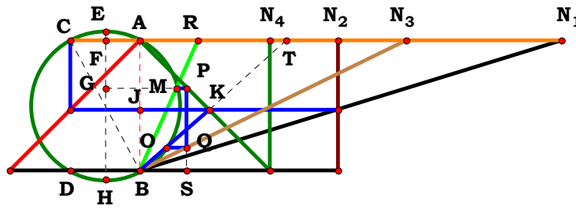
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 + N_u \cdot A \cdot D^2 \cdot (A - B)^2 + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot Z \cdot m \cdot p \cdot \left[Z \cdot (W \cdot n - X \cdot m)^2 - W \cdot X \cdot m \cdot n \cdot p\right]}{W \cdot X^2 \cdot Y \cdot m^2 \cdot n \cdot p^3 - Z^3 \cdot W \cdot n \cdot o \cdot (W \cdot n - X \cdot m)^2 - Z \cdot X \cdot m \cdot p^2 \cdot \left[W^2 \cdot Y \cdot n^2 + X^2 \cdot Y \cdot m^2 - W \cdot X \cdot m \cdot n \cdot (2 \cdot Y - o)\right]} = 0$$

4RST7AB1R2



$N_1 = 3.23246$
$N_2 = 1.51808$
$N_3 = 2.04584$
$N_4 = 0.99741$
R = 0.44685

Unit. $AB := 1$ Given. $N_1 := 3.23246$ $N_2 := 1.51808$ $N_3 := 2.04584$ $N_4 := .99741$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad AJ := \frac{N_1 - N_2}{N_1}$$

$$JK := N_4 \cdot AJ \qquad AT := \frac{JK}{AB - AJ}$$

$$EH := \sqrt{AB^2 + AC^2} \qquad AF := \frac{AC}{2}$$

$$EF := \frac{EH - AB}{2} \qquad BT := \sqrt{AB^2 + AT^2}$$

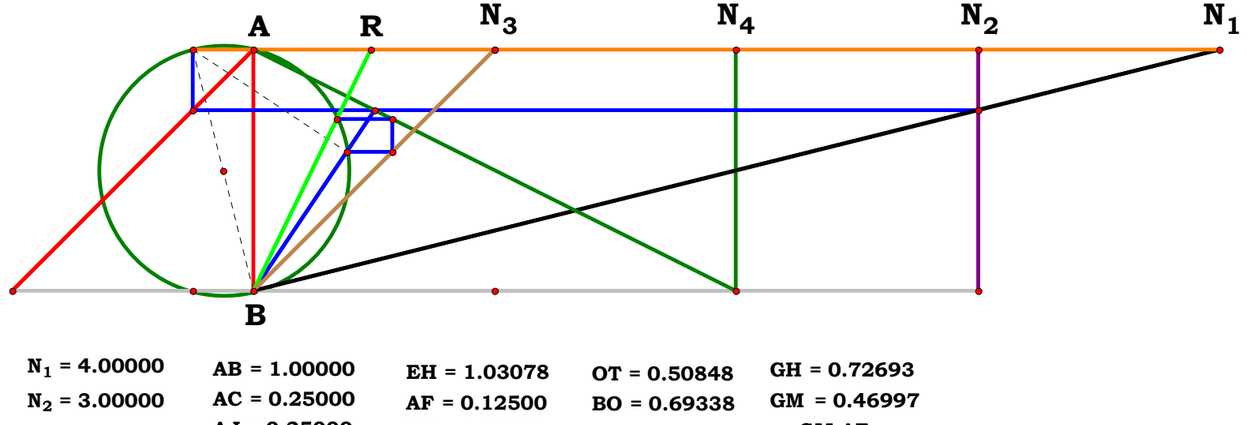
$$CT := AT + AC \qquad OT := \frac{CT \cdot AT}{BT}$$

$$BO := BT - OT \qquad OS := \frac{BO}{BT}$$

$$BS := N_3 \cdot OS \qquad PS := \frac{N_4 - BS}{N_4}$$

$$GH := PS + EF \qquad GM := \sqrt{GH \cdot (EH - GH)}$$

$$R := \frac{GM - AF}{PS} \qquad R = 0.446856$$

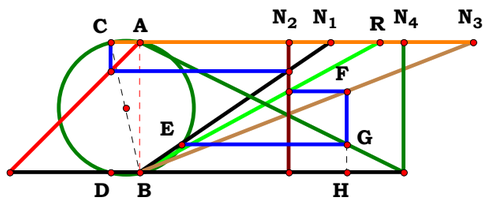


$N_1 = 4.00000$ $AB = 1.00000$ $EH = 1.03078$ $OT = 0.50848$ $GH = 0.72693$
$N_2 = 3.00000$ $AC = 0.25000$ $AF = 0.12500$ $BO = 0.69338$ $GM = 0.46997$
$N_3 = 1.00000$ $AJ = 0.25000$ $EF = 0.01539$ $OS = 0.57692$ $R - \frac{GM - AF}{PS} = 0.00000$
$N_4 = 2.00000$ $JK = 0.50000$ $BT = 1.20185$ $BS = 0.57692$
$R = 0.48483$ $AT = 0.66667$ $CT = 0.91667$ $PS = 0.71154$

Definitions.

$$R - \frac{N_4 \cdot \left[\begin{array}{l} \sqrt{N_4^6 \cdot (N_1 - N_2)^6 - 4 \cdot N_1^2 \cdot N_2^4 \cdot N_3^2 + N_2^2 \cdot N_4^2 \cdot (N_1 - N_2)^2 \cdot \left[4 \cdot N_2 \cdot N_3 \cdot (2 \cdot N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4) + N_2^2 \right]} \ \ldots \ \ldots \\ + 2 \cdot N_2 \cdot N_4^4 \cdot (N_2 - 2 \cdot N_1 \cdot N_3) \cdot (N_1 - N_2)^4 + 4 \cdot N_1 \cdot N_2^3 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 \cdot N_3 + 2 \cdot N_2^2 \cdot N_3 + N_1 \cdot N_2 - 4 \cdot N_1 \cdot N_2 \cdot N_3) \\ + -\sqrt{N_4^2 \cdot (N_1^2 \cdot N_4^2 - 2 \cdot N_1 \cdot N_2 \cdot N_4^2 + N_2^2 \cdot N_4^2 + N_2^2)^2} \cdot (N_1 - N_2) \end{array} \right] \cdot \left[N_4^2 \cdot (N_1 - N_2)^2 + N_2^2 \right]}{2 \cdot \sqrt{N_4^2 \cdot \left[N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_4^2 + 1) \right]^2} \cdot \left[N_1 \cdot (N_1^2 \cdot N_4^3 + N_2^2 \cdot N_4 - N_3 \cdot N_2^2) + N_2^2 \cdot N_4 \cdot (N_1 \cdot N_4^2 + N_2 \cdot N_3) + N_1 \cdot N_2 \cdot N_4 \cdot (N_1 \cdot N_3 - 2 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_4^2) \right]} = 0$$

4RST7AB1R3



$N_1 = 1.45996$
$N_2 = 1.14033$
$N_3 = 2.55918$
$N_4 = 2.02410$
$R = 1.84199$

Unit. $AB := 1$ Given. $N_1 := 1.45996$ $N_2 := 1.14033$ $N_3 := 2.55918$

$N_4 := 2.0241$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $EN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BE := BN_1 - EN_1$ $GH := \frac{BE}{BN_1}$

$BH := N_4 \cdot (AB - GH)$ $FH := \frac{BH}{N_3}$

$R := \frac{N_2}{FH}$ $R = 1.841985$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1 \cdot N_4 \cdot \left(AC + N_1\right)} = 0$$

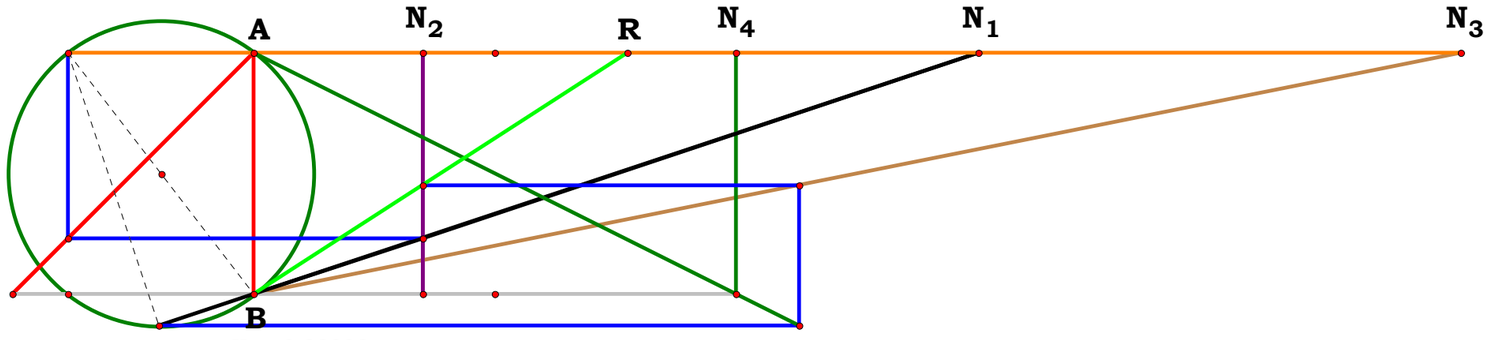
$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_4 \cdot \left(N_1^2 + N_1 - N_2\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot \left(A^2 + N_u^2\right)}{B \cdot C \cdot A - C \cdot A^2 + B \cdot C \cdot N_u} = 0$$

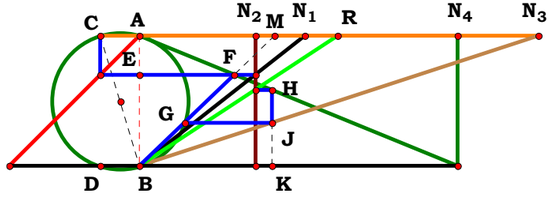
$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot p \cdot \left(W^2 + m^2\right)}{Z \cdot o \cdot \left(n \cdot W^2 + n \cdot W \cdot m - X \cdot m^2\right)} = 0$$



$N_1 = 3.00000$
$N_2 = 0.70000$
$N_3 = 5.00000$
$N_4 = 2.00000$
$R = 1.54867$
$N_2 \cdot N_3 \cdot (N_1^2+1)$
$\frac{N_2 \cdot N_3 \cdot (N_1^2+1)}{N_4 \cdot ((N_1^2+N_1)-N_2)} - R = 0.00000$

4RST7AB1R4



$N_1 = 1.26624$
$N_2 = 0.88850$
$N_3 = 3.06284$
$N_4 = 2.44059$
$R = 1.52469$

Unit. $AB := 1$ **Given.** $N_1 := 1.26624$ $N_2 := .88850$ $N_3 := 3.06284$

$N_4 := 2.44059$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

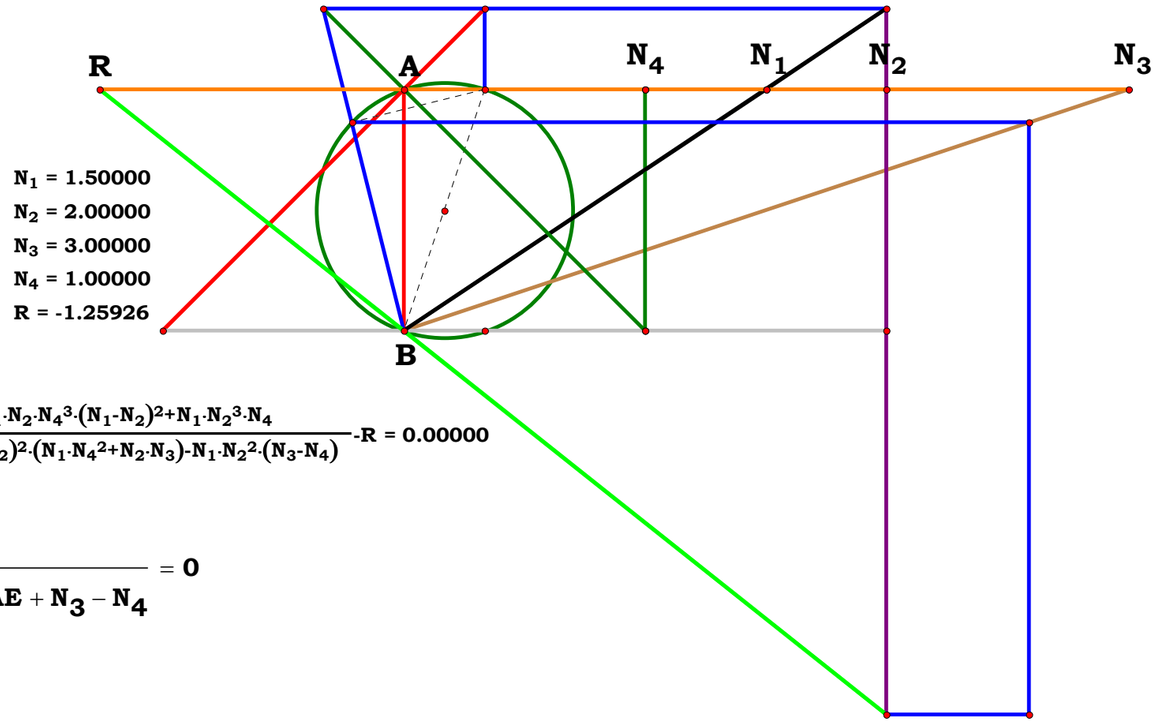
$AC := \frac{N_1 - N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$ $EF := N_4 \cdot AE$

$AM := \frac{EF}{AB - AE}$ $CM := AM + AC$ $BM := \sqrt{AB^2 + AM^2}$

$GM := \frac{AM \cdot CM}{BM}$ $BG := BM - GM$ $JK := \frac{BG}{BM}$

$BK := N_3 \cdot JK$ $HK := \frac{N_4 - BK}{N_4}$

$R := \frac{N_2}{HK}$ $R = 1.524717$



$N_1 = 1.50000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 1.00000$
$R = -1.25926$

$N_1 \cdot N_2 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^3 \cdot N_4$

$\frac{N_1 \cdot N_2 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^3 \cdot N_4}{N_4 \cdot (N_1 - N_2)^2 \cdot (N_1 \cdot N_4^2 + N_2 \cdot N_3) - N_1 \cdot N_2^2 \cdot (N_3 - N_4)} - R = 0.00000$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_4 \cdot AE - N_2 \cdot N_4 - \left(N_2 \cdot N_4^3 + N_2 \cdot N_4\right) \cdot AE^2}{\left(N_3 - N_4 - N_4^3 + AC \cdot N_3 \cdot N_4\right) \cdot AE^2 + \left(2 \cdot N_4 - 2 \cdot N_3 - AC \cdot N_3 \cdot N_4\right) \cdot AE + N_3 - N_4} = 0$$

$$R - \frac{N_1 \cdot N_2 \cdot N_4^3 \cdot \left(N_1 - N_2\right)^2 + N_1 \cdot N_2^3 \cdot N_4}{N_4 \cdot \left(N_1 - N_2\right)^2 \cdot \left(N_1 \cdot N_4^2 + N_2 \cdot N_3\right) - N_1 \cdot N_2^2 \cdot \left(N_3 - N_4\right)} = 0$$

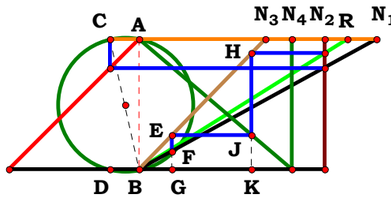
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^3 \cdot C \cdot (A - B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 + N_u \cdot A \cdot D^2 \cdot (A - B)^2 + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Z^3 \cdot W \cdot X \cdot o \cdot (W \cdot n - X \cdot m)^2 + W \cdot X^3 \cdot m^2 \cdot o \cdot p^2 \cdot Z}{Z^3 \cdot W \cdot n \cdot o \cdot (W \cdot n - X \cdot m)^2 + Z \cdot X \cdot m \cdot p^2 \cdot \left[Y \cdot n^2 \cdot W^2 - W \cdot X \cdot m \cdot n \cdot (2 \cdot Y - o) + X^2 \cdot Y \cdot m^2\right] - W \cdot X^2 \cdot Y \cdot m^2 \cdot n \cdot p^3} = 0$$

4RST7AB1R5



$N_1 = 1.81833$
$N_2 = 1.42122$
$N_3 = 0.97071$
$N_4 = 1.17175$
$R = 1.59589$

Unit. $AB := 1$ **Given.** $N_1 := 1.81833$ $N_2 := 1.42122$ $N_3 := .97071$ $N_4 := 1.17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := AB - \frac{N_2}{N_1}$ $CN_1 := AC + N_1$ $BN_1 := \sqrt{AB^2 + N_1{}^2}$

$FN_1 := \frac{N_1 \cdot CN_1}{BN_1}$ $BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$

$EG := \frac{BG}{N_3}$ $BK := N_4 \cdot (AB - EG)$

$HK := \frac{BK}{N_3}$ $R := \frac{N_2}{HK}$ $R = 1.595902$

Definitions.

$$R - \frac{N_2 \cdot N_3{}^2 \cdot \left(N_1{}^2 + 1\right)}{N_3 \cdot N_4 - N_1 \cdot N_4 + AC \cdot N_1{}^2 \cdot N_4 + N_1{}^2 \cdot N_3 \cdot N_4} = 0$$

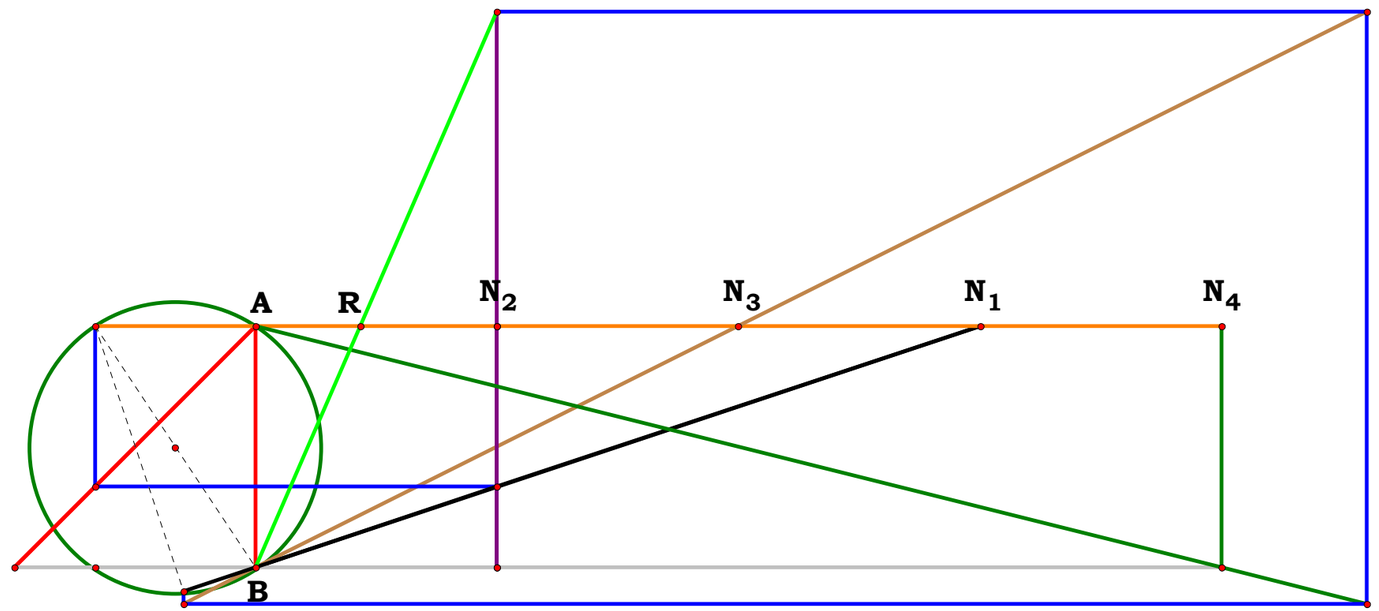
$$R - \frac{N_2 \cdot N_3{}^2 \cdot \left(N_1{}^2 + 1\right)}{N_4 \cdot \left(N_3 - N_1 + N_1{}^2 \cdot N_3 + N_1{}^2 - N_1 \cdot N_2\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{B \cdot C \cdot N_u{}^2 - N_u \cdot C^2 \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

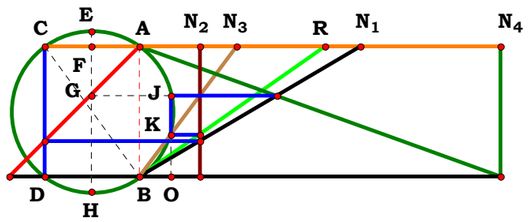
$$R - \frac{X \cdot Y^2 \cdot p \cdot \left(W^2 + m^2\right)}{Y \cdot Z \cdot n \cdot o \cdot \left(W^2 + m^2\right) + W \cdot Z \cdot o^2 \cdot (W \cdot n - X \cdot m - m \cdot n)} = 0$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 0.43478$

$\frac{N_2 \cdot N_3{}^2 \cdot (N_1{}^2+1)}{N_4 \cdot (((N_3-N_1)+N_1{}^2 \cdot N_3+N_1{}^2)-N_1 \cdot N_2)} - R = 0.00000$

4RST7AB1R6



$N_1 = 1.69242$
$N_2 = 0.46232$
$N_3 = 0.74794$
$N_4 = 2.77486$
$R = 1.42468$

Unit. $AB := 1$ **Given.** $N_1 := 1.69242$ $N_2 := .46232$ $N_3 := .74794$

$N_4 := 2.77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

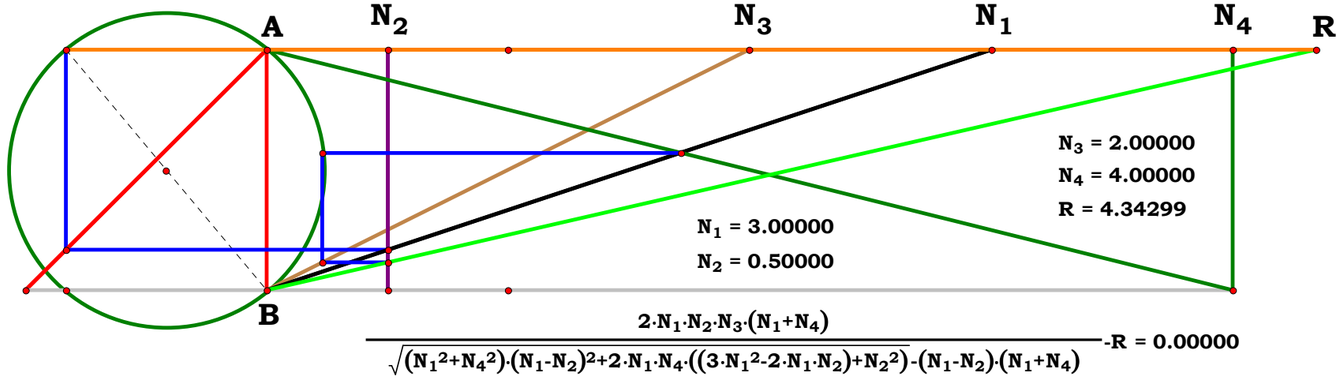
Descriptions.

$AC := AB - \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $BO := GJ - AF$

$KO := \frac{BO}{N_3}$ $R := \frac{N_2}{KO}$ $R = 1.424669$



$$\frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{(N_1^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_1 \cdot N_4 \cdot ((3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2) + N_2^2)} - (N_1 - N_2) \cdot (N_1 + N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot \sqrt{(N_1 + N_4)^2}}{\sqrt{AC^2 \cdot N_1^2 + 2 \cdot AC^2 \cdot N_1 \cdot N_4 + AC^2 \cdot N_4^2 + 4 \cdot N_1 \cdot N_4} - AC \cdot \sqrt{(N_1 + N_4)^2}} = 0$$

$$R - \frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{(N_1^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_1 \cdot N_4 \cdot (3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2)} - (N_1 + N_4) \cdot (N_1 - N_2)} = 0$$

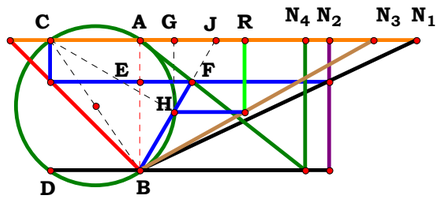
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot (A + D)}{C \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{(A^2 + D^2) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot (A^2 - 2 \cdot A \cdot B + 3 \cdot B^2)}\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot W \cdot X \cdot Y \cdot (W \cdot p + Z \cdot m)}{o \cdot \left[\sqrt{X \cdot m \cdot (W \cdot p + Z \cdot m)^2 \cdot (X \cdot m - 2 \cdot W \cdot n) + W^2 \cdot n^2 \cdot (W^2 \cdot p^2 + 6 \cdot W \cdot Z \cdot m \cdot p + Z^2 \cdot m^2)} - (W \cdot p + Z \cdot m) \cdot (W \cdot n - X \cdot m)\right]} = 0$$

4RST7AB2R0



$N_1 = 2.11859$
$N_2 = 1.45027$
$N_3 = 1.79401$
$N_4 = 1.26861$
$R = 0.80198$

Unit. $AB := 1$ Given. $N_1 := 2.11859$ $N_2 := 1.45027$ $N_3 := 1.79401$

$N_4 := 1.26861$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

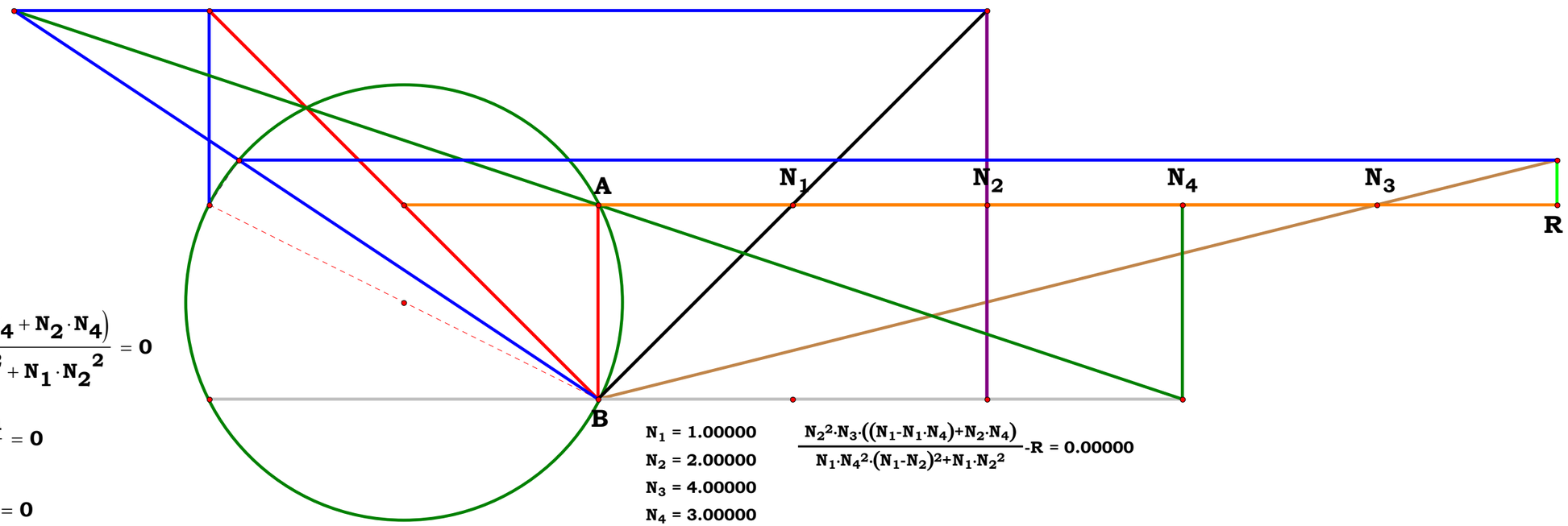
$AC := \frac{N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$ $EF := N_4 \cdot AE$ $AJ := \frac{EF}{AB - AE}$ $BJ := \sqrt{AB^2 + AJ^2}$

$HJ := \frac{AJ + AC}{BJ}$

$HG := \frac{AJ \cdot HJ}{BJ}$

$R := N_3 \cdot (AB - HG)$

$R = 0.801978$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 4.92308$

$\frac{N_2^2 \cdot N_3 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4)}{N_1 \cdot N_4^2 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^2} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_3 \cdot (N_1 - N_1 \cdot N_4 + N_2 \cdot N_4)}{N_1 \cdot N_4^2 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

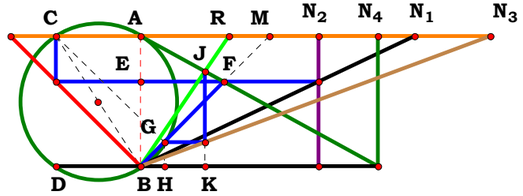
$N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 \cdot D \cdot N_u \cdot [B \cdot D + N_u \cdot (A - B)]}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot m^2 \cdot p \cdot (X \cdot Z \cdot m - W \cdot Z \cdot n + W \cdot n \cdot p)}{Z^2 \cdot W \cdot n \cdot o \cdot (W \cdot n - X \cdot m)^2 + W \cdot X^2 \cdot m^2 \cdot n \cdot o \cdot p^2} = 0$$

4RST7AB2R1



$N_1 = 2.09922$
$N_2 = 1.36310$
$N_3 = 2.68510$
$N_4 = 1.82070$
$R = 0.67719$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.36310$ $N_3 := 2.68510$ $N_4 := 1.82070$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$ $EF := N_4 \cdot AE$

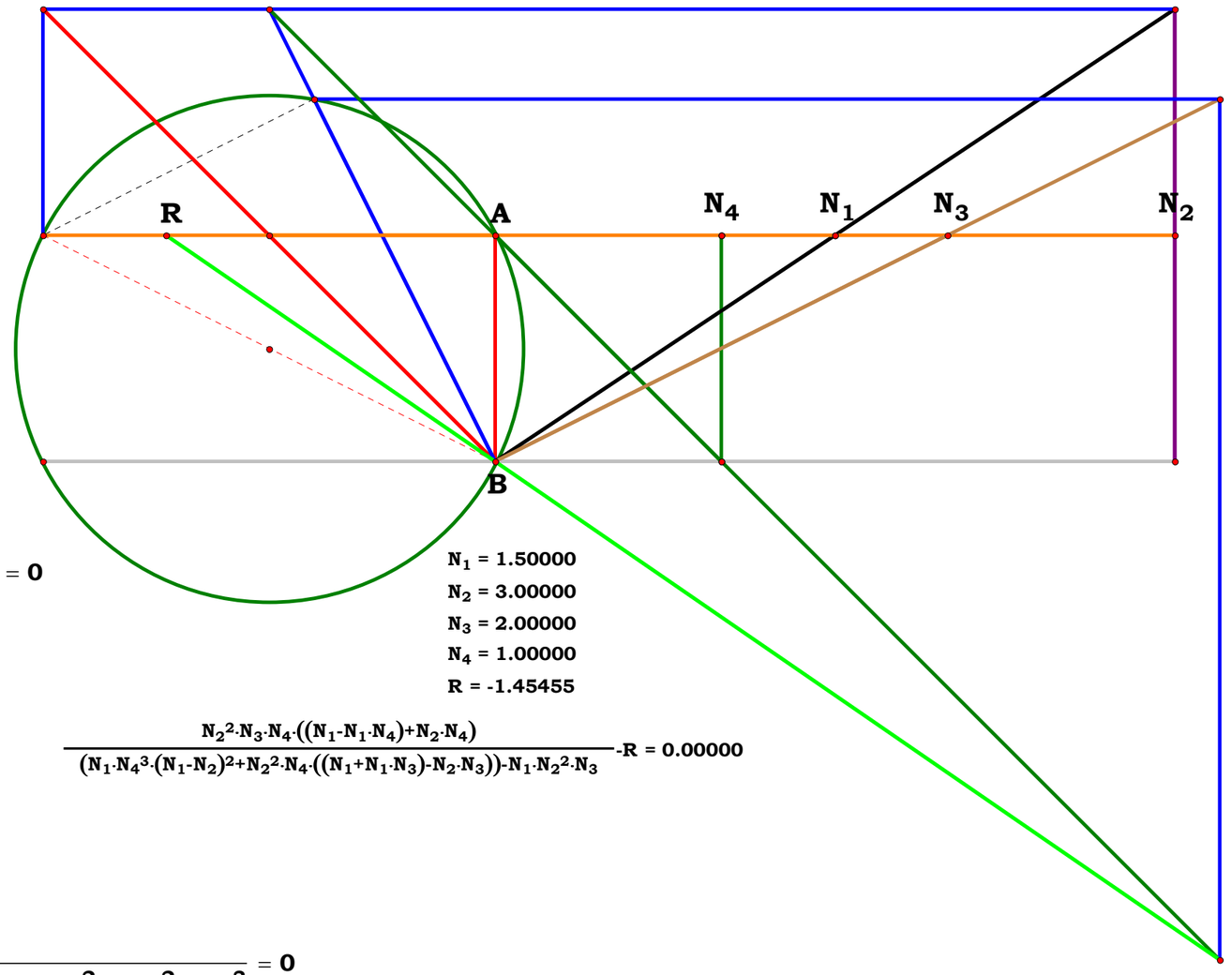
$AM := \frac{EF}{AB - AE}$ $BM := \sqrt{AM^2 + AB^2}$

$FM := \frac{AM \cdot (AM + AC)}{BM}$ $BG := BM - FM$

$GH := \frac{BG}{BM}$ $BK := N_3 \cdot GH$

$JK := \frac{N_4 - BK}{N_4}$ $R := \frac{BK}{JK}$

$R = 0.677186$



$N_1 = 1.50000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 1.00000$
$R = -1.45455$

$\frac{N_2^2 \cdot N_3 \cdot N_4 \cdot ((N_1 - N_1 \cdot N_4) + N_2 \cdot N_4)}{(N_1 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_2^2 \cdot N_4 \cdot ((N_1 + N_1 \cdot N_3) - N_2 \cdot N_3)) - N_1 \cdot N_2^2 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_3 \cdot N_4 \cdot \left(N_1 - N_1 \cdot N_4 + N_2 \cdot N_4\right)}{N_1 \cdot N_4^3 \cdot \left(N_1 - N_2\right)^2 + N_2^2 \cdot N_4 \cdot \left(N_1 + N_1 \cdot N_3 - N_2 \cdot N_3\right) - N_1 \cdot N_2^2 \cdot N_3} = 0$$

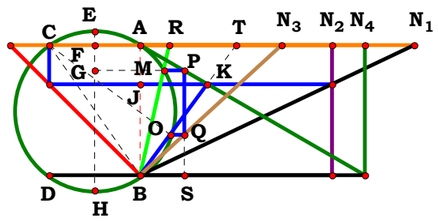
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A - B) + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot Z \cdot m^2 \cdot p \cdot (X \cdot Z \cdot m - W \cdot Z \cdot n + W \cdot n \cdot p)}{Z^3 \cdot W \cdot n \cdot o \cdot (W \cdot n - X \cdot m)^2 + Z \cdot X^2 \cdot m^2 \cdot p^2 \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + W \cdot n \cdot o) - W \cdot X^2 \cdot Y \cdot m^2 \cdot n \cdot p^3} = 0$$

4RST7AB2R2



$N_1 = 2.09922$
$N_2 = 1.46965$
$N_3 = 1.08694$
$N_4 = 1.72384$
$R = 0.22397$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.46965$ $N_3 := 1.08694$ $N_4 := 1.72384$

Descriptions.

$AC := \frac{N_2}{N_1}$ $AJ := \frac{N_1 - N_2}{N_1}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

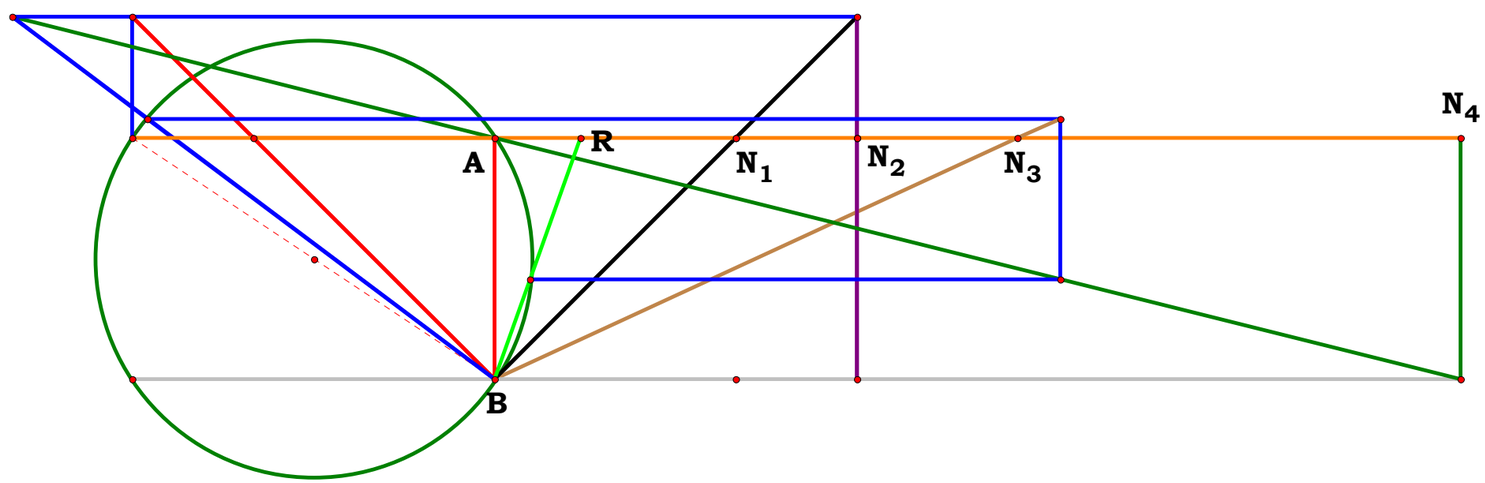
$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.223974$

Definitions.



$N_1 = 1.00000$ $AC = 1.50000$ $AT = -1.33333$ $BT = 1.66667$ $OS = 1.08000$ $GM = 0.89735$

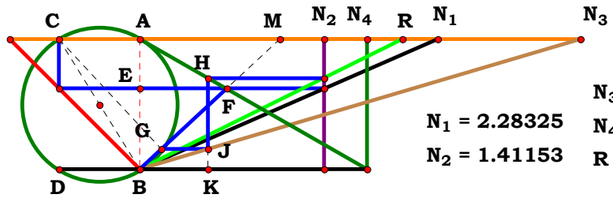
$N_2 = 1.50000$ $AJ = -0.50000$ $EH = 1.80278$ $CT = 0.16667$ $BS = 2.34071$ $R - \frac{GM - AF}{PS} = 0.00000$

$N_3 = 2.16733$ $JK = -2.00000$ $AF = 0.75000$ $OT = -0.13333$ $PS = 0.41482$

$N_4 = 4.00000$ $AB = 1.00000$ $EF = 0.40139$ $BO = 1.80000$ $GH = 0.81621$

$R = 0.35522$

4RST7AB2R4



$N_3 = 3.38247$
$N_4 = 1.74321$
$R = 2.01819$

$N_1 = 2.28325$
$N_2 = 1.41153$

Unit. $AB := 1$ **Given.** $N_1 := 2.28325$ $N_2 := 1.41153$ $N_3 := 3.38247$

$N_4 := 1.74321$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1}$ $AE := \frac{N_1 - N_2}{N_1}$ $EF := N_4 \cdot AE$

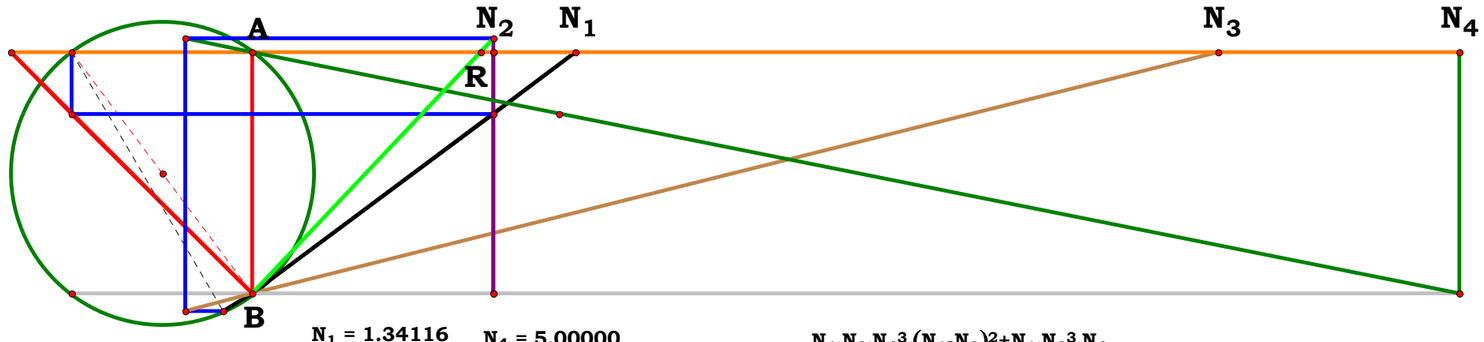
$AM := \frac{EF}{AB - AE}$ $CM := AM + AC$

$BM := \sqrt{AB^2 + AM^2}$ $GM := \frac{AM \cdot CM}{BM}$

$BG := BM - GM$ $JK := \frac{BG}{BM}$

$BK := N_3 \cdot JK$ $HK := \frac{N_4 - BK}{N_4}$

$R := \frac{N_2}{HK}$ $R = 2.01819$



$N_1 = 1.34116$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 0.94730$

$$\frac{N_1 \cdot N_2 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^3 \cdot N_4}{(N_1 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_2^2 \cdot N_4 \cdot ((N_1 + N_1 \cdot N_3) - N_2 \cdot N_3)) - N_1 \cdot N_2^2 \cdot N_3} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_1 \cdot N_2^3 \cdot N_4}{N_1 \cdot N_4^3 \cdot (N_1 - N_2)^2 + N_2^2 \cdot N_4 \cdot (N_1 + N_1 \cdot N_3 - N_2 \cdot N_3) - N_1 \cdot N_2^2 \cdot N_3} = 0$$

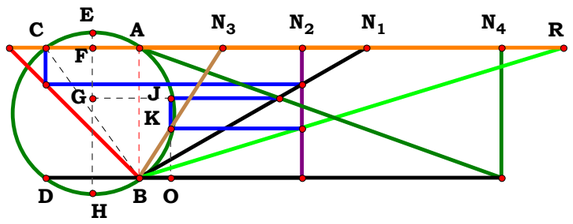
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{N_u^3 \cdot C \cdot (A - B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A - B) + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W \cdot X \cdot Z \cdot o \cdot \left[Z^2 \cdot (W \cdot n - X \cdot m)^2 + X^2 \cdot m^2 \cdot p^2\right]}{Z^3 \cdot W \cdot n \cdot o \cdot (W \cdot n - X \cdot m)^2 + Z \cdot X^2 \cdot m^2 \cdot p^2 \cdot (W \cdot Y \cdot n - X \cdot Y \cdot m + W \cdot n \cdot o) - W \cdot X^2 \cdot Y \cdot m^2 \cdot n \cdot p^3} = 0$$

4RST7AB2R6



$N_1 = 1.74085$
$N_2 = 1.24687$
$N_3 = 0.64140$
$N_4 = 2.77959$
$R = 3.25003$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 1.24687$ $N_3 := .64140$ $N_4 := 2.77959$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

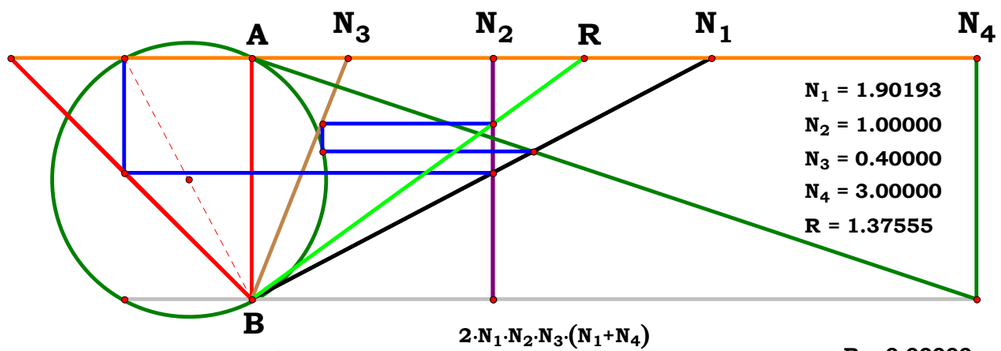
Descriptions.

$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $BO := GJ - AF$

$KO := \frac{BO}{N_3}$ $R := \frac{N_2}{KO}$ $R = 3.250024$



$N_1 = 1.90193$
$N_2 = 1.00000$
$N_3 = 0.40000$
$N_4 = 3.00000$
$R = 1.37555$

$$\frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{4 \cdot N_1^3 \cdot N_4 + N_1^2 \cdot N_2^2 + 2 \cdot N_1 \cdot N_2^2 \cdot N_4 + N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 + N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_1 \cdot N_2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{4 \cdot N_1^3 \cdot N_4 + N_1^2 \cdot N_2^2 + 2 \cdot N_1 \cdot N_2^2 \cdot N_4 + N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 + N_4)} = 0$$

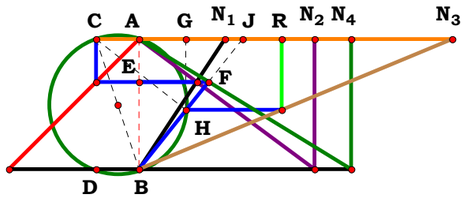
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u^2 \cdot (A + D)}{\sqrt{A} \cdot C \cdot \left(\sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D \right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot W \cdot X \cdot Y \cdot (W \cdot p + Z \cdot m)}{\sqrt{m} \cdot o \cdot \left[\sqrt{X^2 \cdot m^3 \cdot Z^2 + 2 \cdot Z \cdot W \cdot p \cdot \left(2 \cdot W^2 \cdot n^2 + X^2 \cdot m^2 \right) + W^2 \cdot X^2 \cdot m \cdot p^2} - \sqrt{m} \cdot X \cdot (W \cdot p + Z \cdot m) \right]} = 0$$

4RST7AB3R0



$N_1 = 0.65604$
$N_2 = 1.34373$
$N_3 = 2.40421$
$N_4 = 1.62698$
$R = 1.08997$

Unit. $AB := 1$ Given. $N_1 := .65604$ $N_2 := 1.34373$ $N_3 := 2.40421$

$N_4 := 1.62698$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

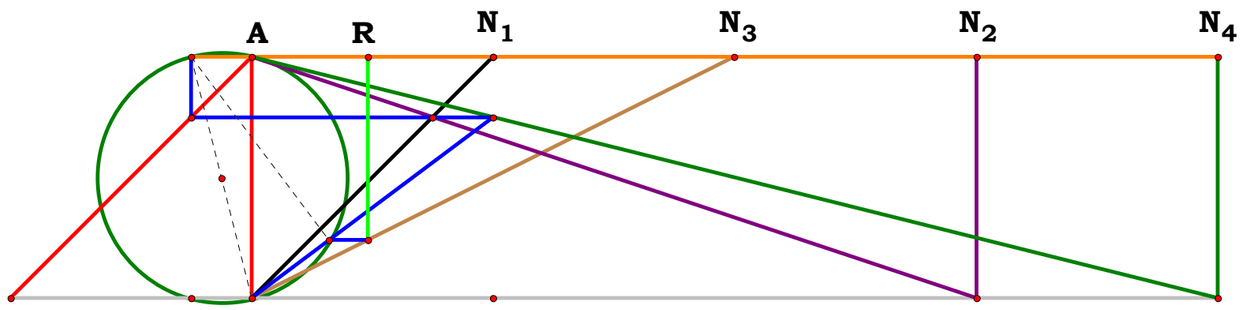
$AC := \frac{N_1}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$

$EF := N_4 \cdot AE$ $AJ := \frac{EF}{AB - AE}$

$BJ := \sqrt{AB^2 + AJ^2}$ $HJ := \frac{AJ + AC}{BJ}$

$HG := \frac{AJ \cdot HJ}{BJ}$ $R := N_3 \cdot (AB - HG)$

$R = 1.089977$



Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot \left(N_1 \cdot N_2 - N_1^2 \cdot N_4 + N_2^2\right)}{\left(N_1 + N_2\right) \cdot \left(N_1^2 \cdot N_4^2 + N_2^2\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u^2\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

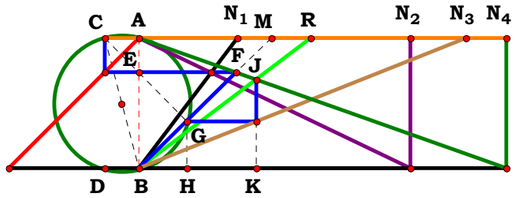
$$R - \frac{X \cdot Y \cdot m \cdot p \cdot \left(p \cdot W \cdot X \cdot m \cdot n - Z \cdot W^2 \cdot n^2 + p \cdot X^2 \cdot m^2\right)}{o \cdot (W \cdot n + X \cdot m) \cdot \left(W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2\right)} = 0$$

B

$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 0.48000$

$$\frac{N_2 \cdot N_3 \cdot \left(\left(N_1 \cdot N_2 - N_1^2 \cdot N_4\right) + N_2^2\right)}{\left(N_1 + N_2\right) \cdot \left(N_1^2 \cdot N_4^2 + N_2^2\right)} - R = 0.00000$$

4RST7AB3R1



$N_1 = 0.75290$
$N_2 = 2.07985$
$N_3 = 2.51075$
$N_4 = 2.81833$
$R = 1.31502$

Unit. $AB := 1$ **Given.** $N_1 := .75290$ $N_2 := 2.07985$ $N_3 := 2.51075$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

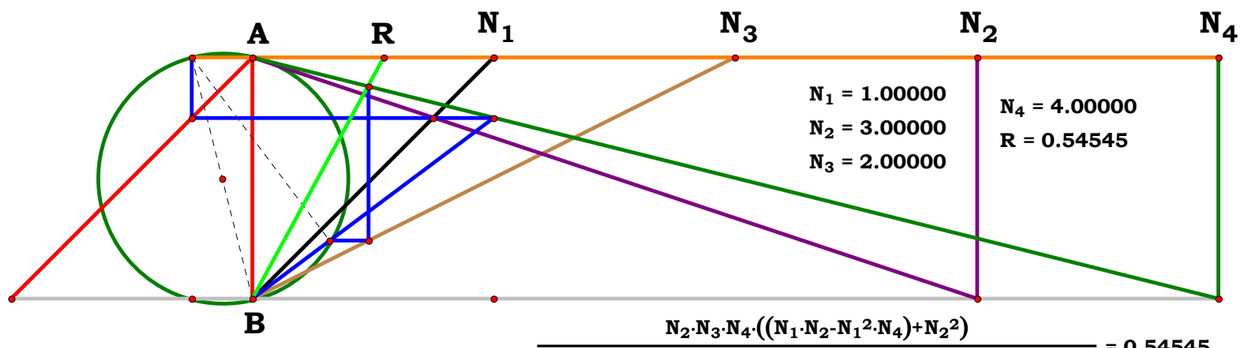
$AC := \frac{N_1}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$ $EF := N_4 \cdot AE$

$AM := \frac{EF}{AB - AE}$ $BM := \sqrt{AM^2 + AB^2}$

$FM := \frac{AM \cdot (AM + AC)}{BM}$ $BG := BM - FM$

$GH := \frac{BG}{BM}$ $BK := N_3 \cdot GH$

$JK := \frac{N_4 - BK}{N_4}$ $R := \frac{BK}{JK}$ $R = 1.315017$



$$\frac{N_2 \cdot N_3 \cdot N_4 \cdot ((N_1 \cdot N_2 - N_1^2 \cdot N_4) + N_2^2)}{(N_1 + N_2) \cdot (N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3) + N_2 \cdot N_4 \cdot (N_1^2 \cdot N_3 + N_1 \cdot N_2 + N_2^2)} = 0.54545$$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1 \cdot N_2 - N_1^2 \cdot N_4 + N_2^2\right)}{\left(N_1 + N_2\right) \cdot \left(N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3\right) + N_2 \cdot N_4 \cdot \left(N_1^2 \cdot N_3 + N_1 \cdot N_2 + N_2^2\right)} = 0$$

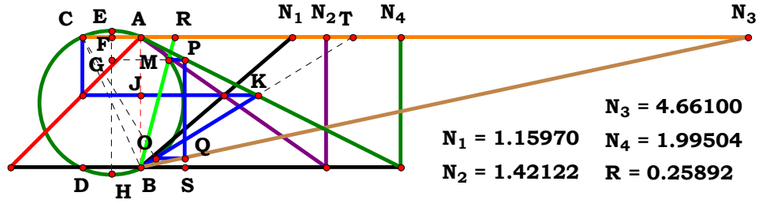
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{N_u^2 \cdot B^2 \cdot C \cdot (A + B) + A \cdot D^2 \cdot \left[A^2 \cdot (C - D) + B^2 \cdot N_u + A \cdot B \cdot (C - D)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot Z \cdot m \cdot p \cdot \left(p \cdot W \cdot X \cdot m \cdot n - Z \cdot W^2 \cdot n^2 + p \cdot X^2 \cdot m^2\right)}{Y \cdot X \cdot m \cdot p^2 \cdot \left(Z \cdot W^2 \cdot n^2 - p \cdot W \cdot X \cdot m \cdot n - p \cdot X^2 \cdot m^2\right) + Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot \left(W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2\right)} = 0$$

4RST7AB3R2



Unit. $AB := 1$ **Given.** $N_1 := 1.15970$ $N_2 := 1.42122$ $N_3 := 4.66100$ $N_4 := 1.99504$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad AJ := \frac{N_1}{N_1 + N_2}$$

$$JK := N_4 \cdot AJ \qquad AT := \frac{JK}{AB - AJ}$$

$$EH := \sqrt{AB^2 + AC^2} \qquad AF := \frac{AC}{2}$$

$$EF := \frac{EH - AB}{2} \qquad BT := \sqrt{AB^2 + AT^2}$$

$$CT := AT + AC \qquad OT := \frac{CT \cdot AT}{BT}$$

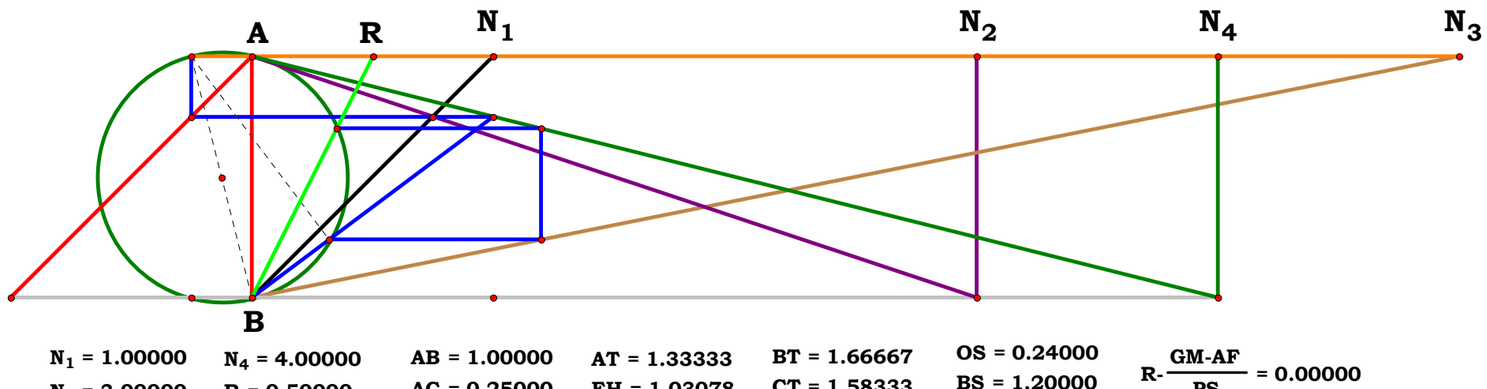
$$BO := BT - OT \qquad OS := \frac{BO}{BT}$$

$$BS := N_3 \cdot OS \qquad PS := \frac{N_4 - BS}{N_4}$$

$$GH := PS + EF \qquad GM := \sqrt{GH \cdot (EH - GH)}$$

$$R := \frac{GM - AF}{PS} \qquad R = 0.258922$$

Definitions.

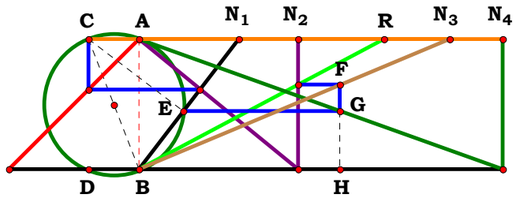


$N_1 = 1.00000$ $N_2 = 3.00000$ $N_3 = 5.00000$ $N_4 = 4.00000$ $R = 0.50000$

$AB = 1.00000$ $AC = 0.25000$ $AJ = 0.25000$ $JK = 1.00000$ $AT = 1.33333$ $EH = 1.03078$ $AF = 0.12500$ $EF = 0.01539$ $BT = 1.66667$ $CT = 1.58333$ $OT = 1.26667$ $BO = 0.40000$ $OS = 0.24000$ $BS = 1.20000$ $PS = 0.70000$ $GH = 0.71539$ $GM = 0.47500$

$$R - \frac{GM - AF}{PS} = 0.00000$$

4RST7AB3R3



$N_1 = 0.76258$
$N_2 = 1.21782$
$N_3 = 2.38484$
$N_4 = 2.78928$
$R = 1.88161$

Unit. $AB := 1$ **Given.** $N_1 := .76258$ $N_2 := 1.21782$ $N_3 := 2.38484$

$N_4 := 2.78928$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

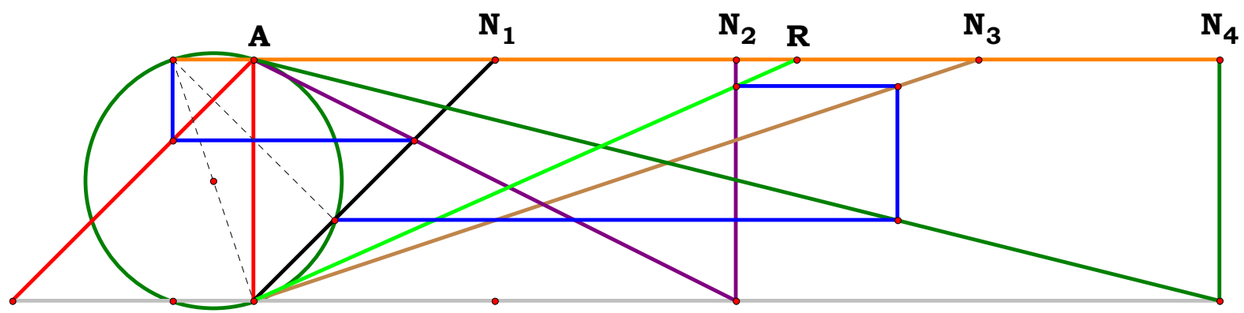
$AC := \frac{N_1}{N_1 + N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $EN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BE := BN_1 - EN_1$ $GH := \frac{BE}{BN_1}$

$BH := N_4 \cdot (AB - GH)$ $FH := \frac{BH}{N_3}$

$R := \frac{N_2}{FH}$ $R = 1.881632$



Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_1^2 \cdot N_4 \cdot (N_1 + N_2 + 1)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot (A^2 + N_u^2) \cdot (A + B)}{B \cdot C \cdot [A \cdot B + N_u \cdot (A + B)]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot p \cdot (W \cdot n + X \cdot m) \cdot (W^2 + m^2)}{W^2 \cdot Z \cdot n \cdot o \cdot (W \cdot n + X \cdot m + m \cdot n)} = 0$$

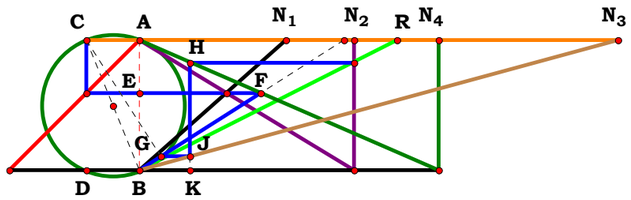
B

$N_1 = 1.00000$ $N_4 = 4.00000$ $\frac{N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_1^2 \cdot N_4 \cdot (N_1 + N_2 + 1)} - R = 0.00000$

$N_2 = 2.00000$ $R = 2.25000$

$N_3 = 3.00000$

4RST7AB3R4



$N_1 = 1.12096$
$N_2 = 1.64399$
$N_3 = 3.67305$
$N_4 = 2.29530$
$R = 1.97967$

Unit. $AB := 1$ **Given.** $N_1 := 1.12096$ $N_2 := 1.64399$ $N_3 := 3.67305$ $N_4 := 2.29530$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

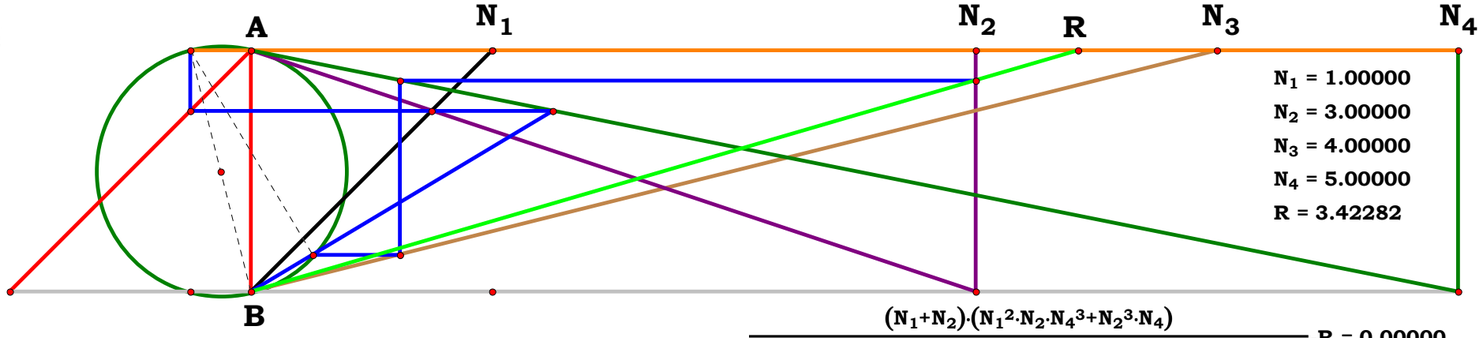
$AC := \frac{N_1}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$ $EF := N_4 \cdot AE$

$AM := \frac{EF}{AB - AE}$ $CM := AM + AC$ $BM := \sqrt{AB^2 + AM^2}$

$GM := \frac{AM \cdot CM}{BM}$ $BG := BM - GM$

$JK := \frac{BG}{BM}$ $BK := N_3 \cdot JK$

$HK := \frac{N_4 - BK}{N_4}$ $R := \frac{N_2}{HK}$ $R = 1.979665$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 3.42282$

$$\frac{(N_1+N_2)\cdot(N_1^2\cdot N_2\cdot N_4^3+N_2^3\cdot N_4)}{(N_1+N_2)\cdot(N_1^2\cdot N_4^3-N_2^2\cdot N_3)+N_2\cdot N_4\cdot(N_1^2\cdot N_3+N_1\cdot N_2+N_2^2)} - R = 0.00000$$

Definitions.

$$R - \frac{(N_1+N_2)\cdot\left(N_1^2\cdot N_2\cdot N_4^3+N_2^3\cdot N_4\right)}{(N_1+N_2)\cdot\left(N_1^2\cdot N_4^3-N_2^2\cdot N_3\right)+N_2\cdot N_4\cdot\left(N_1^2\cdot N_3+N_1\cdot N_2+N_2^2\right)} = 0$$

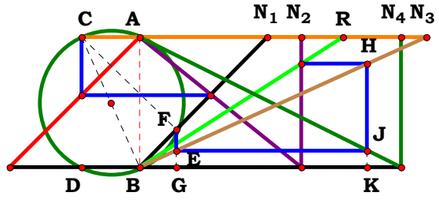
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{C\cdot N_u\cdot(A+B)\cdot\left(A^2\cdot D^2+B^2\cdot N_u^2\right)}{B^3\cdot C\cdot N_u^2\cdot(A+B)+A\cdot B\cdot D^2\cdot\left[A^2\cdot(C-D)+B^2\cdot N_u+A\cdot B\cdot(C-D)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X\cdot Z\cdot o\cdot(W\cdot n+X\cdot m)\cdot\left(W^2\cdot Z^2\cdot n^2+X^2\cdot m^2\cdot p^2\right)}{n\cdot\left[Y\cdot X\cdot m\cdot p^2\cdot\left(Z\cdot W^2\cdot n^2-p\cdot W\cdot X\cdot m\cdot n-p\cdot X^2\cdot m^2\right)+Z\cdot o\cdot(W\cdot n+X\cdot m)\cdot\left(W^2\cdot Z^2\cdot n^2+X^2\cdot m^2\cdot p^2\right)\right]} = 0$$

4RST7AB3R5



$N_1 = 0.97567$
$N_2 = 1.23719$
$N_3 = 2.20081$
$N_4 = 2.00473$
$R = 1.56010$

Unit. $AB := 1$ **Given.** $N_1 := .97567$ $N_2 := 1.23719$ $N_3 := 2.20081$

$N_4 := 2.00473$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

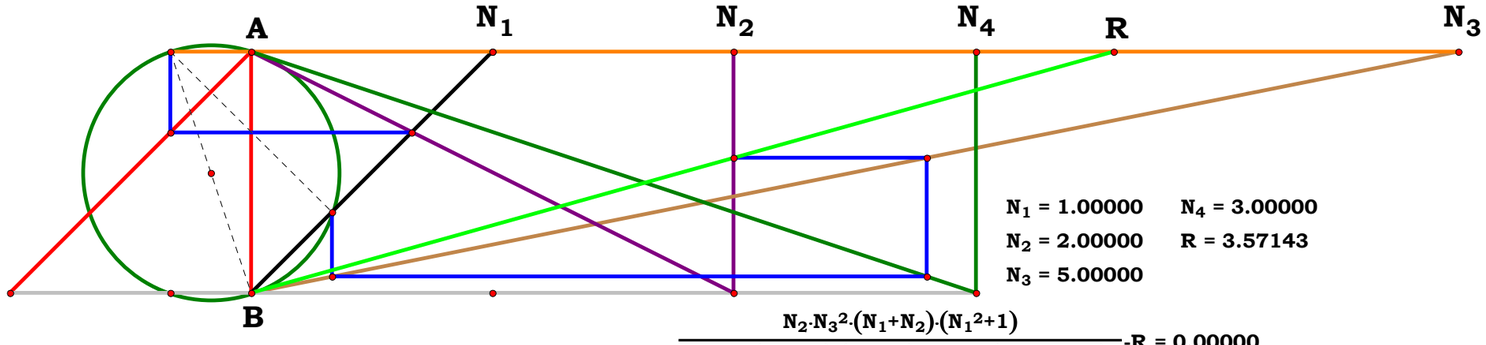
$AC := \frac{N_1}{N_1 + N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $FN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$

$EG := \frac{BG}{N_3}$ $BK := N_4 \cdot (AB - EG)$

$HK := \frac{BK}{N_3}$ $R := \frac{N_2}{HK}$ $R = 1.560102$



$N_1 = 1.00000$ $N_4 = 3.00000$
$N_2 = 2.00000$ $R = 3.57143$
$N_3 = 5.00000$

$$\frac{N_2 \cdot N_3^2 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_3 \cdot N_4 \cdot (N_1 + N_2) \cdot (N_1^2 + 1) + N_1 \cdot N_4 \cdot (N_1^2 - N_1 - N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3^2 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_3 \cdot N_4 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) + N_1 \cdot N_4 \cdot (N_1^2 - N_1 - N_2)} = 0$$

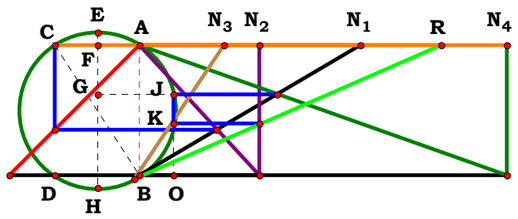
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot N_u \cdot (A^2 + N_u^2) \cdot (A + B)}{B \cdot C \cdot \left[(A + B) \cdot N_u^2 + B \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B) \right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y^2 \cdot p \cdot (W \cdot n + X \cdot m) \cdot (W^2 + m^2)}{Z \cdot n \cdot o \cdot \left[Y \cdot (W^2 + m^2) \cdot (W \cdot n + X \cdot m) + W \cdot o \cdot (n \cdot W^2 - n \cdot W \cdot m - X \cdot m^2) \right]} = 0$$

4RST7AB3R6



$N_1 = 1.69242$
$N_2 = 0.91756$
$N_3 = 0.65108$
$N_4 = 2.81833$
$R = 2.31120$

Unit. $AB := 1$ Given. $N_1 := 1.69242$ $N_2 := .91756$ $N_3 := .65108$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

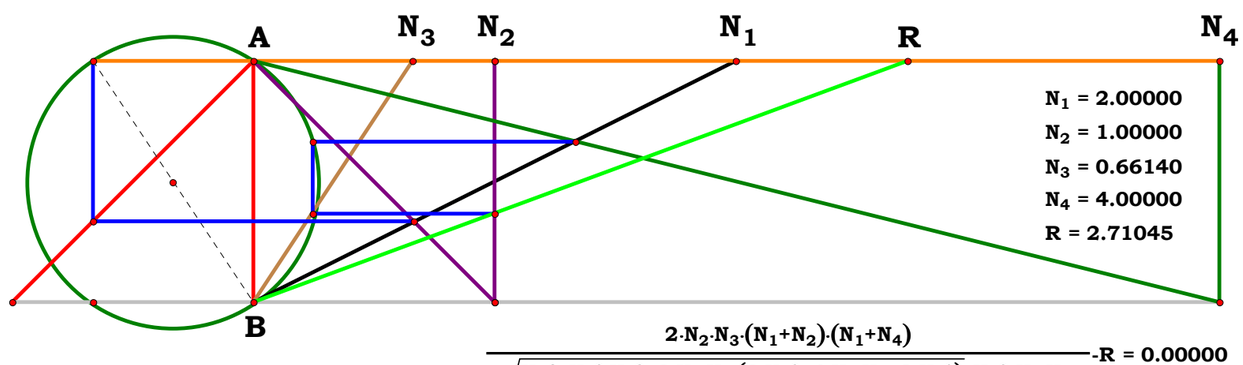
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $BO := GJ - AF$

$KO := \frac{BO}{N_3}$ $R := \frac{N_2}{KO}$ $R = 2.3112$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 0.66140$
$N_4 = 4.00000$
$R = 2.71045$

$$\frac{2 \cdot N_2 \cdot N_3 \cdot (N_1+N_2) \cdot (N_1+N_4)}{\sqrt{N_1{}^4+N_1{}^2 \cdot N_4{}^2+2 \cdot N_1 \cdot N_4 \cdot (3 \cdot N_1{}^2+4 \cdot N_1 \cdot N_2+2 \cdot N_2{}^2)}-N_1{}^2-N_1 \cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1 + N_4)}{\sqrt{N_1{}^4 + 6 \cdot N_1{}^3 \cdot N_4 + 8 \cdot N_1{}^2 \cdot N_2 \cdot N_4 + N_1{}^2 \cdot N_4{}^2 + 4 \cdot N_1 \cdot N_2{}^2 \cdot N_4} - N_1{}^2 - N_1 \cdot N_4} = 0$$

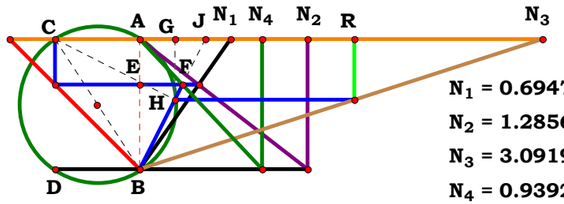
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u{}^2 \cdot (A + B) \cdot (A + D)}{B \cdot C \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A + D)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X \cdot Y \cdot (W \cdot n + X \cdot m) \cdot (W \cdot p + Z \cdot m)}{n \cdot o \cdot \left[\sqrt{W^2 \cdot m^2 \cdot n^2 \cdot Z^2 + 2 \cdot Z \cdot W \cdot m \cdot p \cdot \left(3 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 2 \cdot X^2 \cdot m^2\right) + W^4 \cdot n^2 \cdot p^2} - W \cdot n \cdot (W \cdot p + Z \cdot m)\right]} = 0$$

4RST7AB4R0



$N_1 = 0.69478$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 0.93929$
$R = 1.64829$

Unit. $AB := 1$ Given. $N_1 := .69478$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

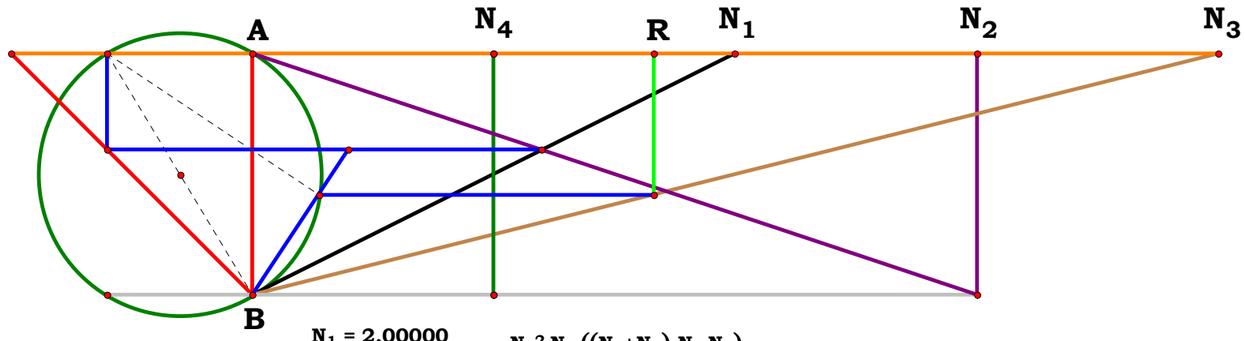
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$ $EF := N_4 \cdot AE$

$AJ := \frac{EF}{AB - AE}$ $BJ := \sqrt{AB^2 + AJ^2}$ $HJ := \frac{AJ + AC}{BJ}$

$HG := \frac{AJ \cdot HJ}{BJ}$ $R := N_3 \cdot (AB - HG)$ $R = 1.648305$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$R = 1.66154$

$\frac{N_2^2 \cdot N_3 \cdot ((N_1+N_2)-N_1 \cdot N_4)}{(N_1+N_2) \cdot (N_1^2 \cdot N_4^2+N_2^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_3 \cdot (N_1 + N_2 - N_1 \cdot N_4)}{(N_1 + N_2) \cdot (N_1^2 \cdot N_4^2 + N_2^2)} = 0$$

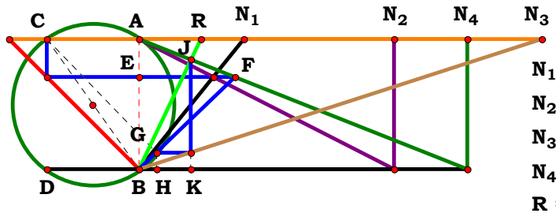
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 \cdot D \cdot N_u \cdot [D \cdot (A + B) - B \cdot N_u]}{C \cdot (A + B) \cdot (A^2 \cdot D^2 + B^2 \cdot N_u^2)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot m^2 \cdot p \cdot (W \cdot n \cdot p - W \cdot Z \cdot n + X \cdot m \cdot p)}{o \cdot (W \cdot n + X \cdot m) \cdot (W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2)} = 0$$

4RST7AB4R1



$N_1 = 0.80133$
$N_2 = 1.95394$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 0.47622$

Unit. $AB := 1$ **Given.** $N_1 := .80133$ $N_2 := 1.95394$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

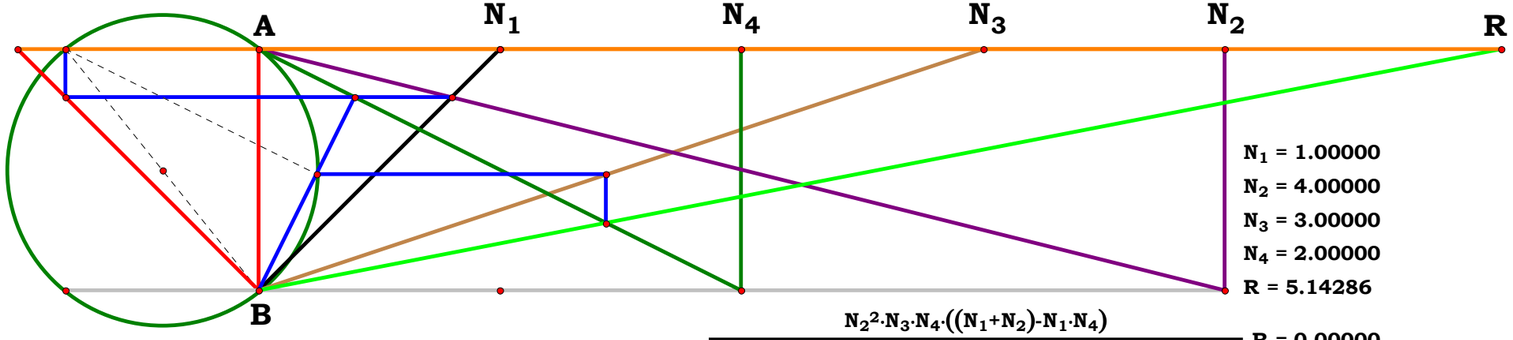
$AC := \frac{N_2}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$ $EF := N_4 \cdot AE$

$AM := \frac{EF}{AB - AE}$ $BM := \sqrt{AM^2 + AB^2}$

$FM := \frac{AM \cdot (AM + AC)}{BM}$ $BG := BM - FM$

$GH := \frac{BG}{BM}$ $BK := N_3 \cdot GH$

$JK := \frac{N_4 - BK}{N_4}$ $R := \frac{BK}{JK}$ $R = 0.476209$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = 5.14286$

$$\frac{N_2^2 \cdot N_3 \cdot N_4 \cdot ((N_1+N_2)-N_1 \cdot N_4)}{(N_1+N_2) \cdot (N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3) + N_2^2 \cdot N_4 \cdot ((N_1+N_2)+N_1 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2^2 \cdot N_3 \cdot N_4 \cdot (N_1 + N_2 - N_1 \cdot N_4)}{(N_1 + N_2) \cdot (N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3) + N_2^2 \cdot N_4 \cdot (N_1 + N_2 + N_1 \cdot N_3)} = 0$$

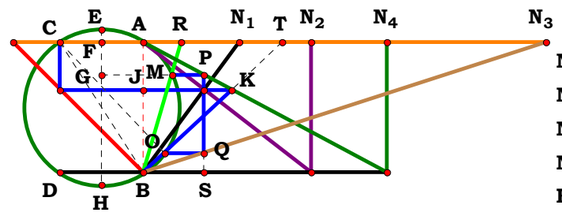
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A^2 \cdot D \cdot N_u \cdot [D \cdot (A + B) - B \cdot N_u]}{N_u^2 \cdot B^2 \cdot C \cdot (A + B) + [A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot (C - D + N_u)]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot Z \cdot m^2 \cdot p \cdot (W \cdot n \cdot p - W \cdot Z \cdot n + X \cdot m \cdot p)}{Y \cdot X^2 \cdot m^2 \cdot p^2 \cdot (W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p) + Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot (W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2)} = 0$$

4RST7AB4R2



$N_1 = 0.73353$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 1.86913$
$R = 0.29052$

Unit. $AB := 1$ **Given.** $N_1 := .73353$ $N_2 := 1.28562$ $N_3 := 3.09190$ $N_4 := 1.86913$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad AJ := \frac{N_1}{N_1 + N_2}$$

$$JK := N_4 \cdot AJ \qquad AT := \frac{JK}{AB - AJ}$$

$$EH := \sqrt{AB^2 + AC^2} \qquad AF := \frac{AC}{2}$$

$$EF := \frac{EH - AB}{2} \qquad BT := \sqrt{AB^2 + AT^2}$$

$$CT := AT + AC \qquad OT := \frac{CT \cdot AT}{BT}$$

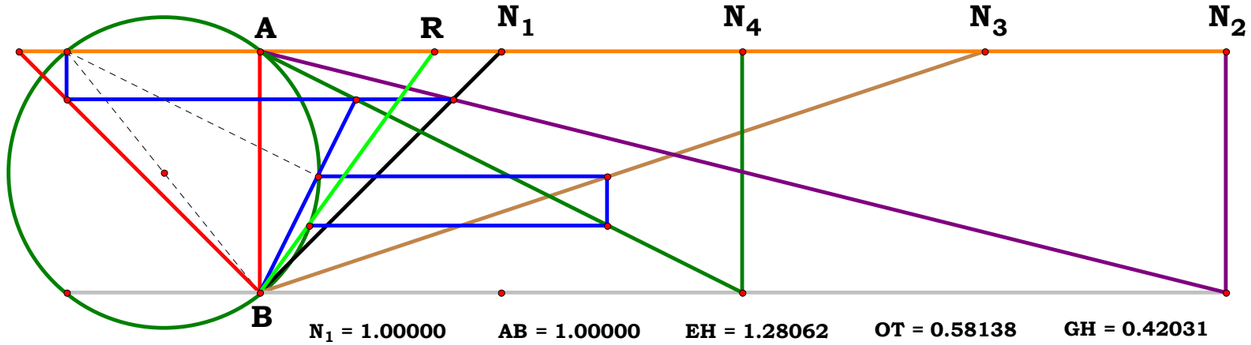
$$BO := BT - OT \qquad OS := \frac{BO}{BT}$$

$$BS := N_3 \cdot OS \qquad PS := \frac{N_4 - BS}{N_4}$$

$$GH := PS + EF \qquad GM := \sqrt{GH \cdot (EH - GH)}$$

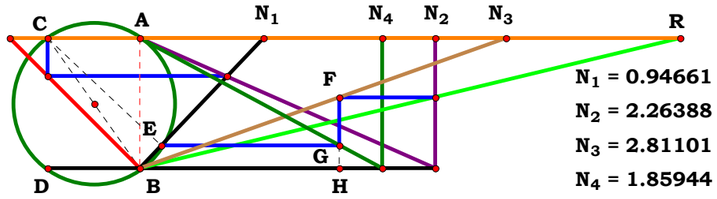
$$R := \frac{GM - AF}{PS} \qquad R = 0.290522$$

Definitions.



$N_1 = 1.00000$ $AB = 1.00000$ $EH = 1.28062$ $OT = 0.58138$ $GH = 0.42031$
$N_2 = 4.00000$ $AC = 0.80000$ $AF = 0.40000$ $BO = 0.53666$ $GM = 0.60133$
$N_3 = 3.00000$ $AJ = 0.20000$ $EF = 0.14031$ $OS = 0.48000$ $R - \frac{GM - AF}{PS} = 0.00000$
$N_4 = 2.00000$ $JK = 0.40000$ $BT = 1.11803$ $BS = 1.44000$
$R = 0.71904$ $AT = 0.50000$ $CT = 1.30000$ $PS = 0.28000$

4RST7AB4R3



$N_1 = 0.94661$
$N_2 = 2.26388$
$N_3 = 2.81101$
$N_4 = 1.85944$
$R = 4.15020$

Unit. $AB := 1$ Given. $N_1 := .94661$ $N_2 := 2.26388$ $N_3 := 2.81101$

$N_4 := 1.85944$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

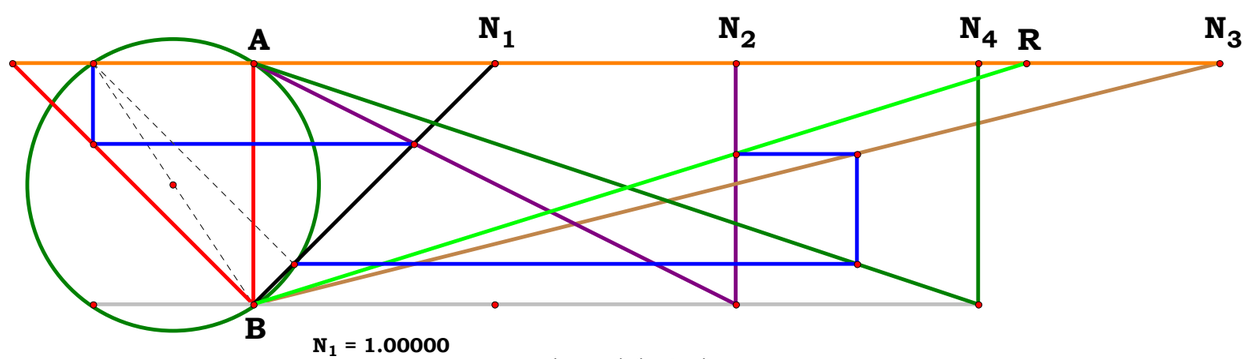
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $CN_1 := AC + N_1$ $BN_1 := \sqrt{AB^2 + N_1{}^2}$

$EN_1 := \frac{N_1 \cdot CN_1}{BN_1}$ $BE := BN_1 - EN_1$

$GH := \frac{BE}{BN_1}$ $BH := N_4 \cdot (AB - GH)$

$FH := \frac{BH}{N_3}$ $R := \frac{N_2}{FH}$ $R = 4.150208$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 3.20000$

$\frac{N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1{}^2 + 1)}{N_1 \cdot N_4 \cdot (N_1{}^2 + N_1 \cdot N_2 + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1{}^2 + 1)}{N_1 \cdot N_4 \cdot (N_1{}^2 + N_1 \cdot N_2 + N_2)} = 0$$

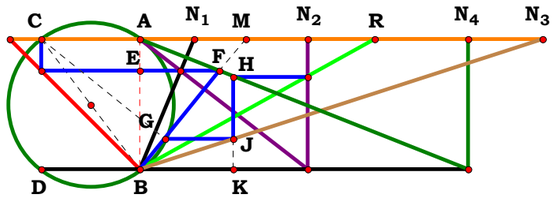
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot (A^2 + N_u{}^2) \cdot (A + B)}{B \cdot C \cdot (A^2 + N_u \cdot A + B \cdot N_u)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y \cdot p \cdot (W \cdot n + X \cdot m) \cdot (W^2 + m^2)}{W \cdot Z \cdot n \cdot o \cdot (n \cdot W^2 + X \cdot W \cdot m + X \cdot m^2)} = 0$$

4RST7AB4R4



$N_1 = 0.41390$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 1.80200$

Unit. $AB := 1$ Given. $N_1 := .41390$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AE := \frac{N_1}{N_1 + N_2}$ $EF := N_4 \cdot AE$

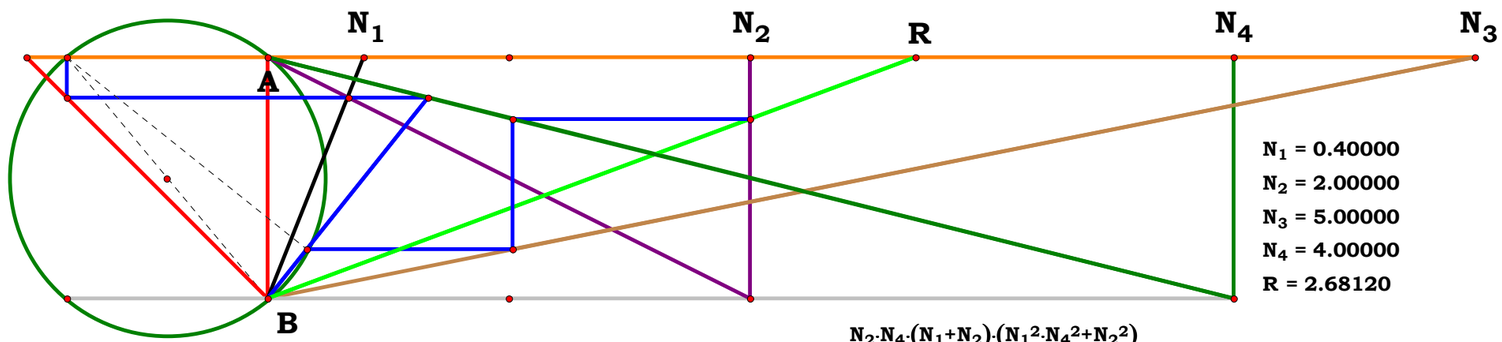
$AM := \frac{EF}{AB - AE}$ $CM := AM + AC$

$BM := \sqrt{AB^2 + AM^2}$ $GM := \frac{AM \cdot CM}{BM}$

$BG := BM - GM$ $JK := \frac{BG}{BM}$

$BK := N_3 \cdot JK$ $HK := \frac{N_4 - BK}{N_4}$

$R := \frac{N_2}{HK}$ $R = 1.801987$



$N_1 = 0.40000$
$N_2 = 2.00000$
$N_3 = 5.00000$
$N_4 = 4.00000$
$R = 2.68120$

$$\frac{N_2 \cdot N_4 \cdot (N_1+N_2) \cdot (N_1^2 \cdot N_4^2 + N_2^2)}{(N_1+N_2) \cdot (N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3) + N_2^2 \cdot N_4 \cdot ((N_1+N_2) + N_1 \cdot N_3)} - R = 0.00000$$

Definitions.

$$R - \frac{(N_1 + N_2) \cdot N_2 \cdot N_4 \cdot (N_1^2 \cdot N_4^2 + N_2^2)}{(N_1 + N_2) \cdot (N_1^2 \cdot N_4^3 - N_2^2 \cdot N_3) + N_2^2 \cdot N_4 \cdot (N_1 + N_2 + N_1 \cdot N_3)} = 0$$

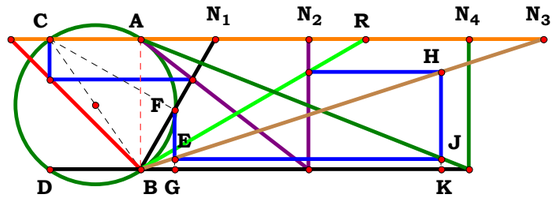
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{C \cdot N_u \cdot (A + B) \cdot (A^2 \cdot D^2 + B^2 \cdot N_u^2)}{N_u^2 \cdot B^3 \cdot C \cdot (A + B) + A^2 \cdot B^2 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (C - D) \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Z \cdot o \cdot (W \cdot n + X \cdot m) \cdot (W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2)}{Y \cdot X^2 \cdot m^2 \cdot n \cdot p^2 \cdot (W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p) + Z \cdot n \cdot o \cdot (W \cdot n + X \cdot m) \cdot (W^2 \cdot Z^2 \cdot n^2 + X^2 \cdot m^2 \cdot p^2)} = 0$$

4RST7AB4R5



$N_1 = 0.56887$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 1.72370$

Unit. $AB := 1$ Given. $N_1 := .56887$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

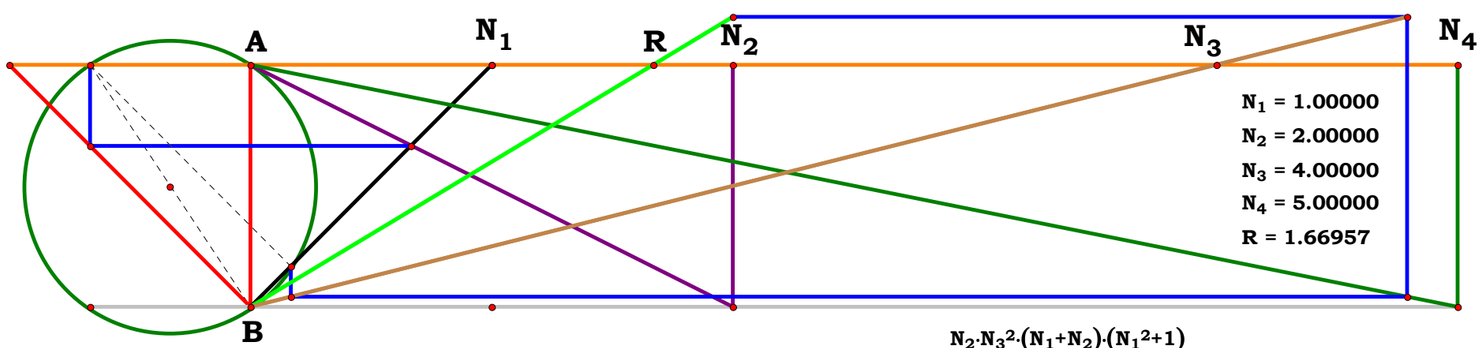
$AC := \frac{N_2}{N_1 + N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $FN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$

$EG := \frac{BG}{N_3}$ $BK := N_4 \cdot (AB - EG)$

$HK := \frac{BK}{N_3}$ $R := \frac{N_2}{HK}$ $R = 1.723697$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 1.66957$

$$\frac{N_2 \cdot N_3^2 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_3 \cdot N_4 \cdot (N_1 + N_2) \cdot (N_1^2 + 1) + N_1 \cdot N_4 \cdot (N_1 \cdot N_2 - (N_1 + N_2))} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3^2 \cdot (N_1 + N_2) \cdot (N_1^2 + 1)}{N_3 \cdot N_4 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) + N_1 \cdot N_4 \cdot (N_1 \cdot N_2 - N_2 - N_1)} = 0$$

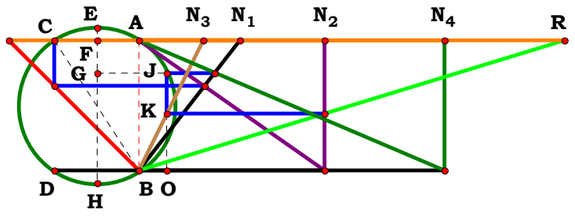
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot N_u \cdot (A^2 + N_u^2) \cdot (A + B)}{B \cdot C \cdot [(A + B) \cdot N_u^2 + A \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X \cdot Y^2 \cdot p \cdot (W \cdot n + X \cdot m) \cdot (W^2 + m^2)}{Z \cdot n \cdot o \cdot [Y \cdot (W^2 + m^2) \cdot (W \cdot n + X \cdot m) + W \cdot m \cdot o \cdot (W \cdot X - W \cdot n - X \cdot m)]} = 0$$

4RST7AB4R6



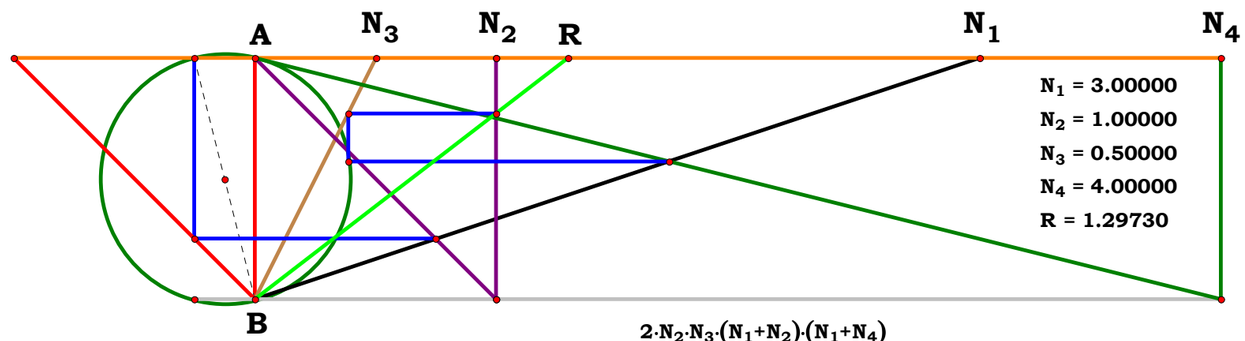
$N_1 = 0.77227$
$N_2 = 1.42122$
$N_3 = 0.49611$
$N_4 = 2.34373$
$R = 3.26696$

Unit. $AB := 1$ Given. $N_1 := .77227$ $N_2 := 1.42122$ $N_3 := .49611$

$N_4 := 2.34373$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 0.50000$
$N_4 = 4.00000$
$R = 1.29730$

$$\frac{2 \cdot N_2 \cdot N_3 \cdot (N_1+N_2) \cdot (N_1+N_4)}{\sqrt{N_2^2 \cdot N_4^2 + 2 \cdot N_1 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2) + N_1^2 \cdot N_2^2} - N_2 \cdot (N_1+N_4)} - R = 0.00000$$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$

$BO := GJ - AF$ $KO := \frac{BO}{N_3}$

$R := \frac{N_2}{KO}$ $R = 3.266965$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3 \cdot (N_1 + N_2) \cdot (N_1 + N_4)}{\sqrt{N_2^2 \cdot N_4^2 + 2 \cdot N_1 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2) + N_1^2 \cdot N_2^2} - N_2 \cdot (N_1 + N_4)} = 0$$

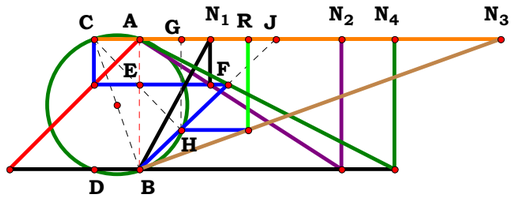
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u^4 \cdot (A+B) \cdot (A+D)}{\sqrt{A} \cdot B \cdot C \cdot N_u^2 \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X \cdot Y \cdot (W \cdot n + X \cdot m) \cdot (W \cdot p + Z \cdot m)}{\sqrt{m} \cdot n \cdot o \cdot \left[\sqrt{4 \cdot Z \cdot n^2 \cdot p \cdot W^3 + W^2 \cdot X \cdot m \cdot p \cdot (X \cdot p + 8 \cdot Z \cdot n) + X^2 \cdot Z \cdot m^2 \cdot (6 \cdot W \cdot p + Z \cdot m)} - \sqrt{m} \cdot X \cdot (W \cdot p + Z \cdot m)\right]} = 0$$

4RST7AB5R0



$N_1 = 0.53981$
$N_2 = 1.54713$
$N_3 = 2.77227$
$N_4 = 1.95630$
$R = 0.83763$

Unit. $AB := 1$ Given. $N_1 := .53981$ $N_2 := 1.54713$ $N_3 := 2.77227$

$N_4 := 1.95630$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

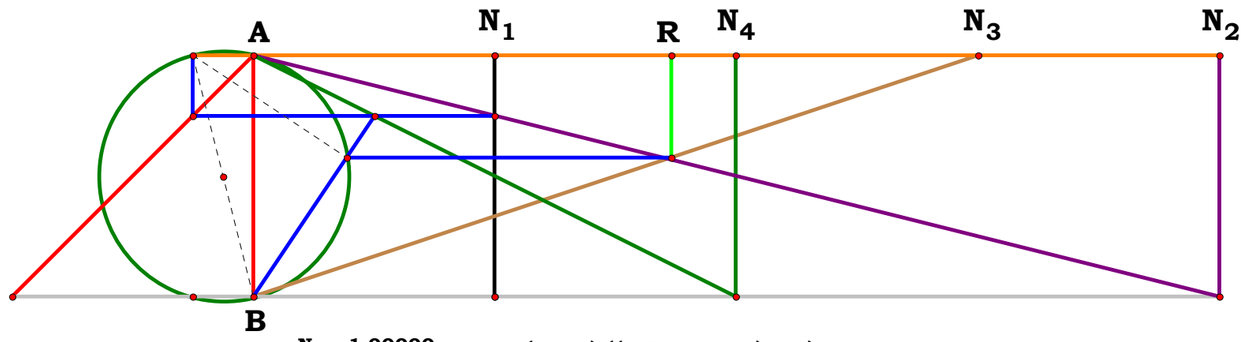
Descriptions.

$AC := \frac{N_1}{N_2}$ $AE := \frac{N_1}{N_2}$ $EF := N_4 \cdot AE$

$AJ := \frac{EF}{AB - AE}$ $BJ := \sqrt{AB^2 + AJ^2}$

$HJ := \frac{AJ + AC}{BJ}$ $HG := \frac{AJ \cdot HJ}{BJ}$

$R := N_3 \cdot (AB - HG)$ $R = 0.837627$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = 1.73077$

$\frac{N_3 \cdot (N_1 - N_2) \cdot ((N_1^2 \cdot N_4 + N_1 \cdot N_2) - N_2^2)}{N_2 \cdot (((N_1^2 \cdot N_4^2 + N_1^2) - 2 \cdot N_1 \cdot N_2) + N_2^2)} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot (N_1 - N_2) \cdot \left(N_1^2 \cdot N_4 + N_1 \cdot N_2 - N_2^2\right)}{N_2 \cdot \left(N_1^2 \cdot N_4^2 + N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2\right)} = 0$$

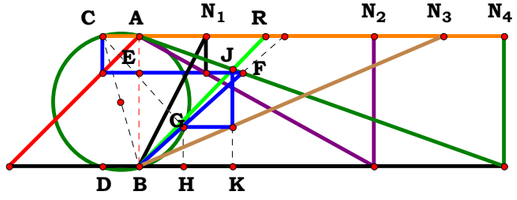
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot N_u \cdot (A - B) \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right)}{A \cdot C \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u^2\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot p \cdot (W \cdot n - X \cdot m) \cdot \left(Z \cdot W^2 \cdot n^2 + p \cdot W \cdot X \cdot m \cdot n - p \cdot X^2 \cdot m^2\right)}{X \cdot m \cdot o \cdot \left[W^2 \cdot n^2 \cdot \left(Z^2 + p^2\right) + X \cdot m \cdot p^2 \cdot (X \cdot m - 2 \cdot W \cdot n)\right]} = 0$$

4RST7AB5R1



$N_1 = 0.51075$
$N_2 = 1.79896$
$N_3 = 2.33641$
$N_4 = 2.79896$
$R = 0.96414$

Unit. $AB := 1$ Given. $N_1 := .51075$ $N_2 := 1.79896$ $N_3 := 2.33641$

$N_4 := 2.79896$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

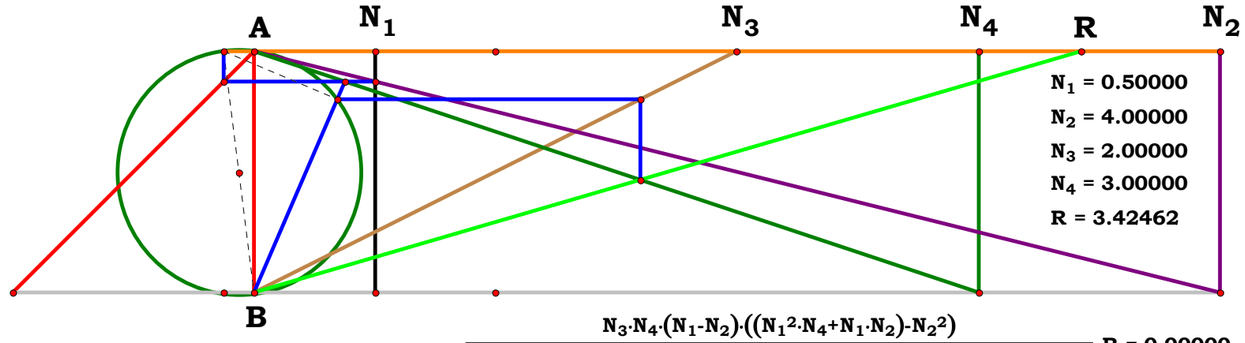
$AC := \frac{N_1}{N_2}$ $AE := \frac{N_1}{N_2}$ $EF := N_4 \cdot AE$

$AM := \frac{EF}{AB - AE}$ $BM := \sqrt{AM^2 + AB^2}$

$FM := \frac{AM \cdot (AM + AC)}{BM}$ $BG := BM - FM$

$GH := \frac{BG}{BM}$ $BK := N_3 \cdot GH$

$JK := \frac{N_4 - BK}{N_4}$ $R := \frac{BK}{JK}$ $R = 0.96416$



$N_1 = 0.50000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$N_4 = 3.00000$
$R = 3.42462$

$$\frac{N_3 \cdot N_4 \cdot (N_1 - N_2) \cdot ((N_1^2 \cdot N_4 + N_1 \cdot N_2) - N_2^2)}{N_1^2 \cdot N_2 \cdot N_4^3 - N_4 \cdot (N_1 - N_2) \cdot ((N_1^2 \cdot N_3 - N_1 \cdot N_2) + N_2^2) - N_2 \cdot N_3 \cdot (N_1 - N_2)^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot N_4 \cdot (N_1 - N_2) \cdot (N_1^2 \cdot N_4 + N_1 \cdot N_2 - N_2^2)}{N_1^2 \cdot N_2 \cdot N_4^3 - N_4 \cdot (N_1 - N_2) \cdot (N_1^2 \cdot N_3 - N_1 \cdot N_2 + N_2^2) - N_2 \cdot N_3 \cdot (N_1 - N_2)^2} = 0$$

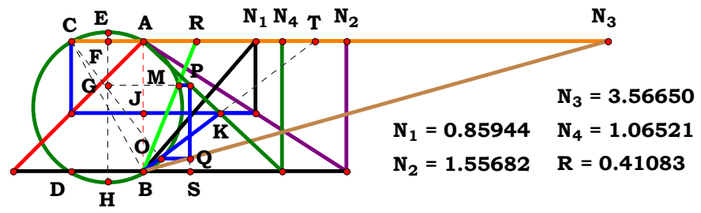
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot N_u \cdot (A - B) \cdot (D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2)}{A \cdot B^2 \cdot C \cdot N_u^2 + N_u \cdot B^2 \cdot D^2 \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{Y \cdot Z \cdot p \cdot (W \cdot n - X \cdot m) \cdot (Z \cdot W^2 \cdot n^2 + p \cdot W \cdot X \cdot m \cdot n - p \cdot X^2 \cdot m^2)}{W^2 \cdot X \cdot m \cdot n^2 \cdot o \cdot Z^3 - Z \cdot p^2 \cdot (W \cdot n - X \cdot m) \cdot (Y \cdot W^2 \cdot n^2 - o \cdot W \cdot X \cdot m \cdot n + o \cdot X^2 \cdot m^2) - X \cdot Y \cdot m \cdot p^3 \cdot (W \cdot n - X \cdot m)^2} = 0$$

4RST7AB5R2



$N_3 = 3.56650$
$N_1 = 0.85944$ $N_4 = 1.06521$
$N_2 = 1.55682$ $R = 0.41083$

Unit. $AB := 1$ **Given.** $N_1 := .85944$ $N_2 := 1.55682$ $N_3 := 3.56650$ $N_4 := 1.06521$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad AJ := \frac{N_1}{N_2}$$

$$JK := N_4 \cdot AJ \qquad AT := \frac{JK}{AB - AJ}$$

$$EH := \sqrt{AB^2 + AC^2} \qquad AF := \frac{AC}{2}$$

$$EF := \frac{EH - AB}{2} \qquad BT := \sqrt{AB^2 + AT^2}$$

$$CT := AT + AC \qquad OT := \frac{CT \cdot AT}{BT}$$

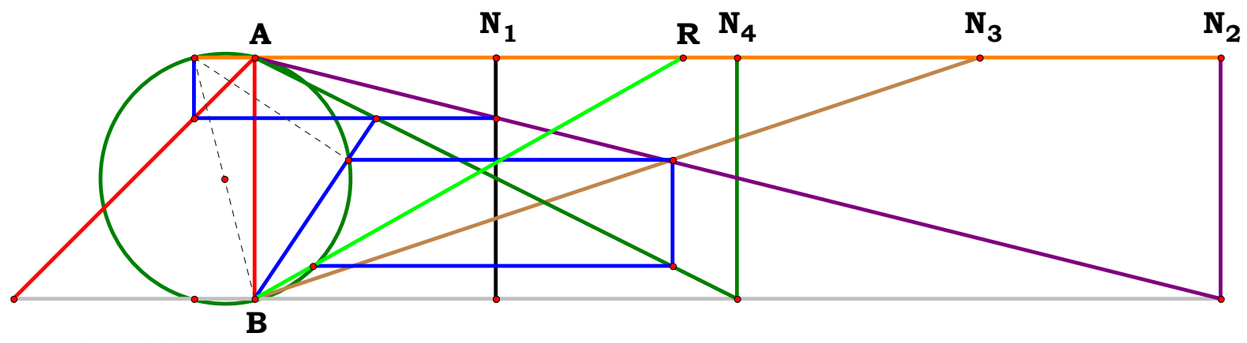
$$BO := BT - OT \qquad OS := \frac{BO}{BT}$$

$$BS := N_3 \cdot OS \qquad PS := \frac{N_4 - BS}{N_4}$$

$$GH := PS + EF \qquad GM := \sqrt{GH \cdot (EH - GH)}$$

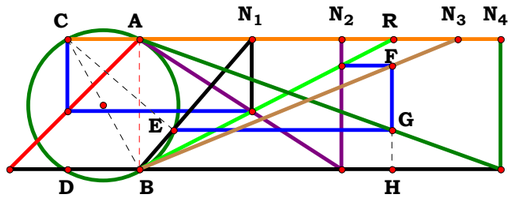
$$R := \frac{GM - AF}{PS} \qquad R = 0.410843$$

Definitions.



$N_1 = 1.00000$ $AB = 1.00000$ $EH = 1.03078$ $OT = 0.50848$ $GH = 0.15000$
$N_2 = 4.00000$ $AC = 0.25000$ $AF = 0.12500$ $BO = 0.69338$ $GM = 0.36348$
$N_3 = 3.00000$ $AJ = 0.25000$ $EF = 0.01539$ $OS = 0.57692$ $R\text{-}\frac{GM\text{-}AF}{PS} = 0.00000$
$N_4 = 2.00000$ $JK = 0.50000$ $BT = 1.20185$ $BS = 1.73077$
$R = 1.77158$ $AT = 0.66667$ $CT = 0.91667$ $PS = 0.13462$

4RST7AB5R3



$N_1 = 0.85944$
$N_2 = 1.54713$
$N_3 = 2.44295$
$N_4 = 2.76991$
$R = 1.95088$

Unit. $AB := 1$ **Given.** $N_1 := .85944$ $N_2 := 1.54713$ $N_3 := 2.44295$ $N_4 := 2.76991$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

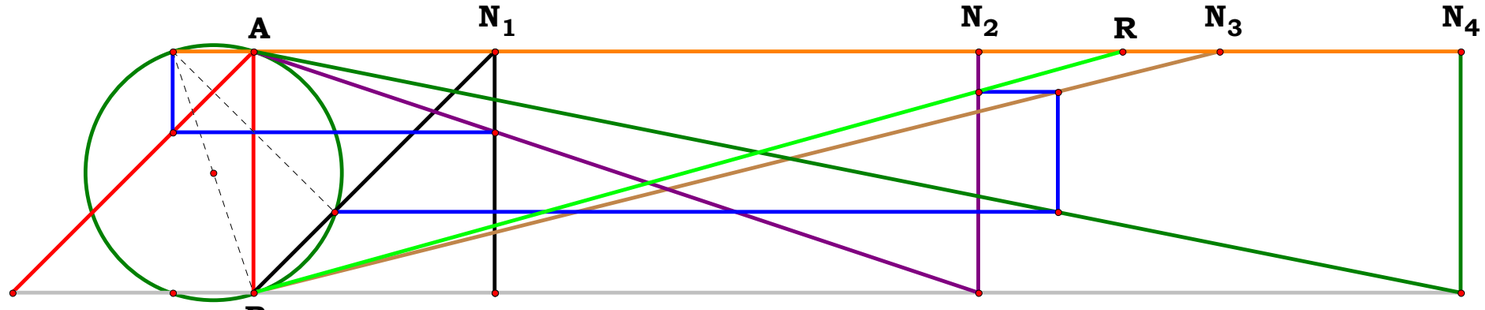
$AC := \frac{N_1}{N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $EN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BE := BN_1 - EN_1$ $GH := \frac{BE}{BN_1}$

$BH := N_4 \cdot (AB - GH)$ $FH := \frac{BH}{N_3}$

$R := \frac{N_2}{FH}$ $R = 1.950874$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 3.60000$

$\frac{N_2^2 \cdot N_3 \cdot (N_1^2+1)}{N_1^2 \cdot N_4 \cdot (N_2+1)} - R = 0.00000$

Definitions.

$$R - \frac{N_2^2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1^2 \cdot N_4 \cdot \left(N_2 + 1\right)} = 0$$

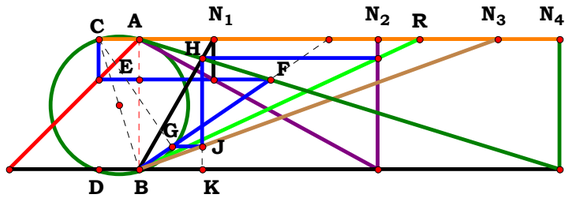
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{D \cdot \left(A^2 + N_u^2\right)}{B \cdot C \cdot \left(B + N_u\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y \cdot p \cdot \left(W^2 + m^2\right)}{W^2 \cdot Z \cdot n \cdot o \cdot (X + n)} = 0$$

4RST7AB5R4



$N_1 = 0.56887$
$N_2 = 1.82802$
$N_3 = 2.75290$
$N_4 = 3.22514$
$R = 2.14906$

Unit. $AB := 1$ Given. $N_1 := .56887$ $N_2 := 1.82802$ $N_3 := 2.75290$

$N_4 := 3.22514$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $AE := \frac{N_1}{N_2}$ $EF := N_4 \cdot AE$

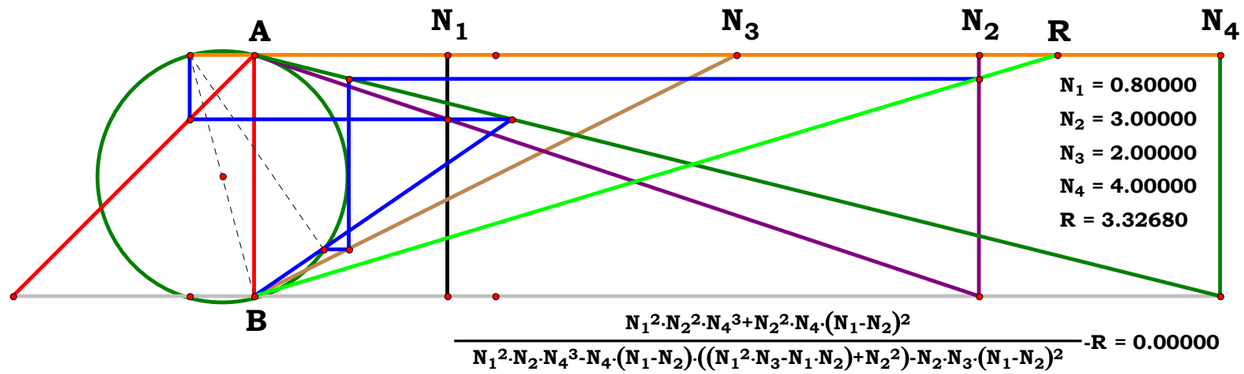
$AM := \frac{EF}{AB - AE}$ $CM := AM + AC$

$BM := \sqrt{AB^2 + AM^2}$ $GM := \frac{AM \cdot CM}{BM}$

$BG := BM - GM$ $JK := \frac{BG}{BM}$

$BK := N_3 \cdot JK$ $HK := \frac{N_4 - BK}{N_4}$

$R := \frac{N_2}{HK}$ $R = 2.149049$



$N_1 = 0.80000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 3.32680$

$$\frac{N_1^2 \cdot N_2^2 \cdot N_4^3 + N_2^2 \cdot N_4 \cdot (N_1 - N_2)^2}{N_1^2 \cdot N_2 \cdot N_4^3 - N_4 \cdot (N_1 - N_2) \cdot ((N_1^2 \cdot N_3 - N_1 \cdot N_2) + N_2^2) - N_2 \cdot N_3 \cdot (N_1 - N_2)^2} - R = 0.00000$$

Definitions.

$$R - \frac{N_1^2 \cdot N_2^2 \cdot N_4^3 + N_2^2 \cdot N_4 \cdot (N_1 - N_2)^2}{N_1^2 \cdot N_2 \cdot N_4^3 - N_4 \cdot (N_1 - N_2) \cdot (N_1^2 \cdot N_3 - N_1 \cdot N_2 + N_2^2) - N_2 \cdot N_3 \cdot (N_1 - N_2)^2} = 0$$

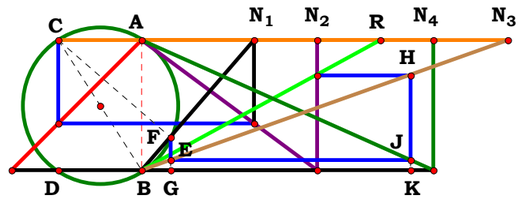
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot C \cdot N_u \cdot (A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u^2)}{A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D) + A \cdot B^3 \cdot (D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u^2) - B^4 \cdot D^2 \cdot N_u} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{W^2 \cdot X^2 \cdot m \cdot n^2 \cdot o \cdot Z^3 + Z \cdot X^2 \cdot m \cdot o \cdot p^2 \cdot (W \cdot n - X \cdot m)^2}{W^2 \cdot X \cdot m \cdot n^3 \cdot o \cdot Z^3 - Z \cdot n \cdot p^2 \cdot (W \cdot n - X \cdot m) \cdot (Y \cdot W^2 \cdot n^2 - o \cdot W \cdot X \cdot m \cdot n + o \cdot X^2 \cdot m^2) - X \cdot Y \cdot m \cdot n \cdot p^3 \cdot (W \cdot n - X \cdot m)^2} = 0$$

4RST7AB5R5



$N_1 = 0.85944$
$N_2 = 1.34373$
$N_3 = 2.81101$
$N_4 = 2.23719$
$R = 1.83359$

Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 1.34373$ $N_3 := 2.81101$

$N_4 := 2.23719$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

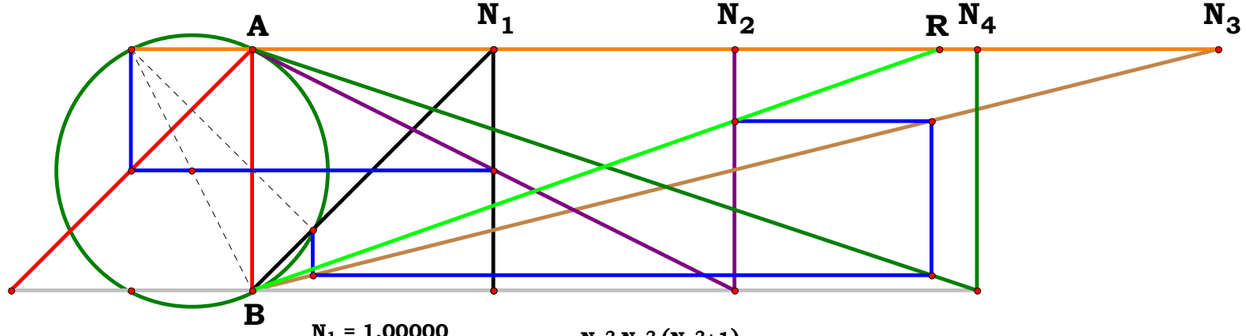
$AC := \frac{N_1}{N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $FN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$

$EG := \frac{BG}{N_3}$ $BK := N_4 \cdot (AB - EG)$

$HK := \frac{BK}{N_3}$ $R := \frac{N_2}{HK}$ $R = 1.833581$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$R = 2.84444$

$$\frac{N_2^2 \cdot N_3^2 \cdot (N_1^2+1)}{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2+1) + N_1 \cdot N_4 \cdot (N_1^2 - N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_2^2 \cdot N_3^2 \cdot (N_1^2 + 1)}{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 1) + N_1 \cdot N_4 \cdot (N_1^2 - N_2)} = 0$$

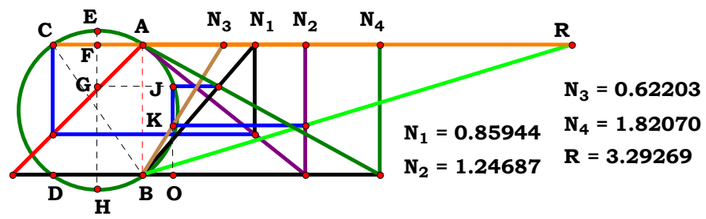
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot D \cdot N_u \cdot (A^2 + N_u^2)}{A^2 \cdot B \cdot C \cdot (A - C) + B \cdot C \cdot N_u \cdot (B \cdot C + A \cdot N_u)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{X^2 \cdot Y^2 \cdot m \cdot p \cdot (W^2 + m^2)}{Y \cdot X \cdot Z \cdot m \cdot n \cdot o \cdot (W^2 + m^2) + W \cdot Z \cdot n \cdot o^2 \cdot (W^2 \cdot n - X \cdot m^2)} = 0$$

4RST7AB5R6



Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 1.24687$ $N_3 := .62203$

$N_4 := 1.82070$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

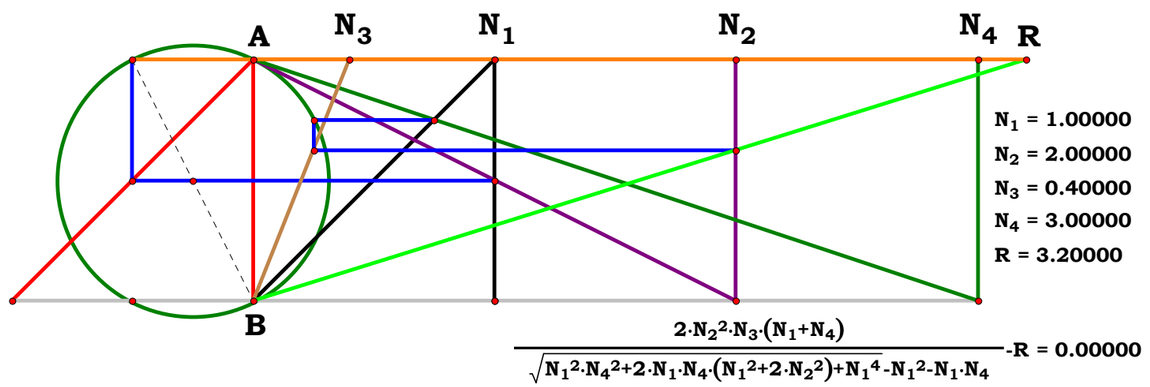
$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $BO := GJ - AF$

$KO := \frac{BO}{N_3}$ $R := \frac{N_2}{KO}$ $R = 3.29271$



Definitions.

$$R - \frac{2 \cdot N_2^2 \cdot N_3 \cdot (N_1 + N_4)}{\sqrt{N_1^2 \cdot N_4^2 + 2 \cdot N_1 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2) + N_1^4} - N_1^2 - N_1 \cdot N_4} = 0$$

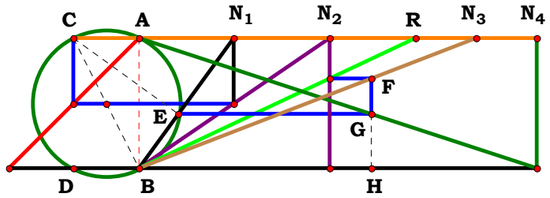
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot A \cdot N_u^2 \cdot (A + D)}{B \cdot C \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X^2 \cdot Y \cdot m \cdot (W \cdot p + Z \cdot m)}{n \cdot o \cdot \left[\sqrt{W^2 \cdot m^2 \cdot n^2 \cdot Z^2 + 2 \cdot Z \cdot W \cdot m \cdot p \cdot \left(W^2 \cdot n^2 + 2 \cdot X^2 \cdot m^2\right) + W^4 \cdot n^2 \cdot p^2} - W \cdot n \cdot (W \cdot p + Z \cdot m)\right]} = 0$$

4RST7AB6R3



$N_1 = 0.72384$
$N_2 = 1.45996$
$N_3 = 2.58824$
$N_4 = 3.05079$
$R = 2.12346$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 1.45996$ $N_3 := 2.58824$

$N_4 := 3.05079$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

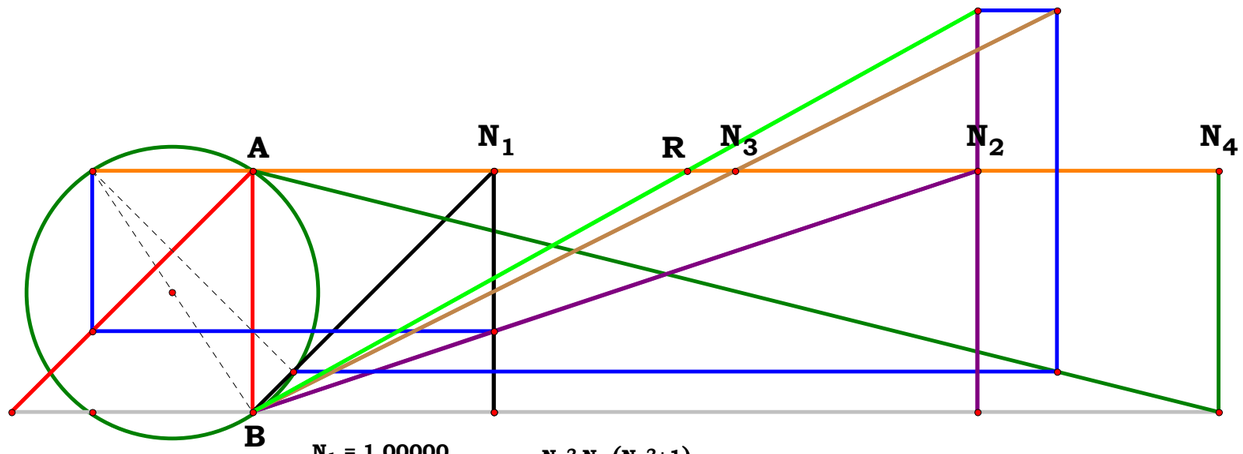
$AC := \frac{N_2 - N_1}{N_2}$ $CN_1 := AC + N_1$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $EN_1 := \frac{N_1 \cdot CN_1}{BN_1}$

$BE := BN_1 - EN_1$ $GH := \frac{BE}{BN_1}$

$BH := N_4 \cdot (AB - GH)$ $FH := \frac{BH}{N_3}$

$R := \frac{N_2}{FH}$ $R = 2.123466$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 1.80000$

$\frac{N_2^2 \cdot N_3 \cdot (N_1^2+1)}{N_1 \cdot N_4 \cdot ((N_2-N_1)+N_1 \cdot N_2)} - R = 0.00000$

Definitions.

$R - \frac{N_2^2 \cdot N_3 \cdot \left(N_1^2 + 1\right)}{N_1 \cdot N_4 \cdot \left(N_2 - N_1 + N_1 \cdot N_2\right)} = 0$

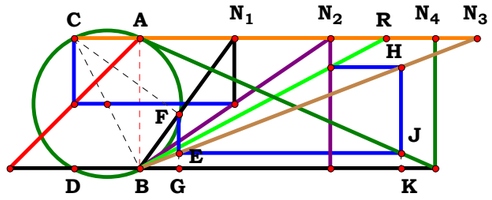
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$R - \frac{D \cdot \left(A^2 + N_u^2\right)}{B \cdot C \cdot \left(A - B + N_u\right)} = 0$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$R - \frac{X^2 \cdot Y \cdot p \cdot \left(W^2 + m^2\right)}{W \cdot Z \cdot n \cdot o \cdot (W \cdot X - W \cdot n + X \cdot m)} = 0$

4RST7AB6R5



$N_1 = 0.72384$
$N_2 = 1.45996$
$N_3 = 2.58824$
$N_4 = 2.26624$
$R = 1.88734$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 1.45996$ $N_3 := 2.58824$

$N_4 := 2.26624$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad CN_1 := AC + N_1$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot CN_1}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1}$$

$$EG := \frac{BG}{N_3} \qquad BK := N_4 \cdot (AB - EG)$$

$$HK := \frac{BK}{N_3} \qquad R := \frac{N_2}{HK} \qquad R = 1.887347$$

Definitions.

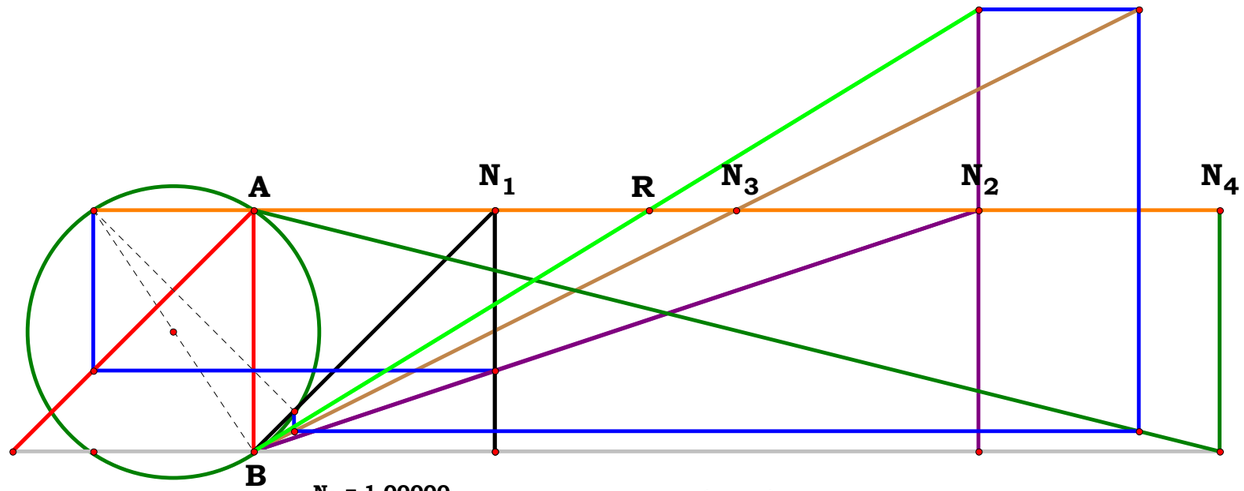
$$R - \frac{N_2^2 \cdot N_3^2 \cdot \left(N_1^2 + 1\right)}{N_2 \cdot N_3 \cdot N_4 \cdot \left(N_1^2 + 1\right) - N_1 \cdot N_4 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{A \cdot D \cdot N_u \cdot \left(A^2 + N_u^2\right)}{B \cdot C \cdot \left[A^3 - C \cdot A^2 + N_u \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

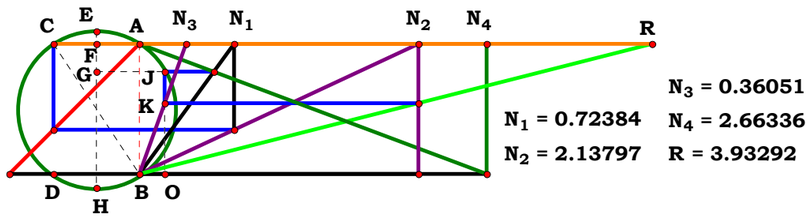
$$R - \frac{X^2 \cdot Y^2 \cdot m \cdot p \cdot \left(W^2 + m^2\right)}{Y \cdot X \cdot Z \cdot m \cdot n \cdot o \cdot \left(W^2 + m^2\right) - W \cdot Z \cdot n \cdot o^2 \cdot \left(n \cdot W^2 - X \cdot W \cdot m + X \cdot m^2\right)} = 0$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 4.00000$
$R = 1.63636$

$$\frac{N_2^2 \cdot N_3^2 \cdot (N_1^2+1)}{N_2 \cdot N_3 \cdot N_4 \cdot (N_1^2+1) - N_1 \cdot N_4 \cdot ((N_1^2 - N_1 \cdot N_2) + N_2)} - R = 0.00000$$

4RST7AB6R6



$N_3 = 0.36051$
$N_1 = 0.72384$ $N_4 = 2.66336$
$N_2 = 2.13797$ $R = 3.93292$

Unit. $AB := 1$ **Given.** $N_1 := .72384$ $N_2 := 2.13797$ $N_3 := .36051$ $N_4 := 2.66336$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

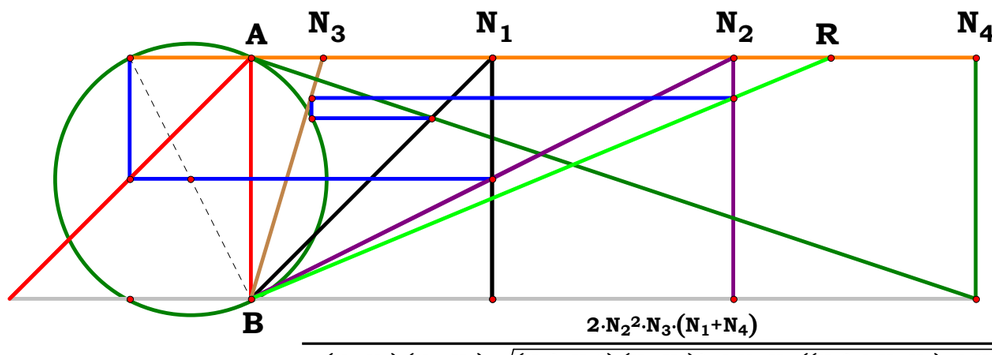
$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$JO := \frac{N_4}{N_4 + N_1}$ $GH := JO + EF$

$GJ := \sqrt{GH \cdot (EH - GH)}$ $BO := GJ - AF$

$KO := \frac{BO}{N_3}$ $R := \frac{N_2}{KO}$ $R = 3.93294$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 0.30000$
$N_4 = 3.00000$
$R = 2.40000$

$$\frac{2 \cdot N_2^2 \cdot N_3 \cdot (N_1 + N_4)}{(N_1 - N_2) \cdot (N_1 + N_4) + \sqrt{(N_1^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_1 \cdot N_4 \cdot ((N_1^2 - 2 \cdot N_1 \cdot N_2) + 3 \cdot N_2^2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2^2 \cdot N_3 \cdot (N_1 + N_4)}{(N_1 + N_4) \cdot (N_1 - N_2) + \sqrt{(N_1^2 + N_4^2) \cdot (N_1 - N_2)^2 + 2 \cdot N_1 \cdot N_4 \cdot (N_1^2 - 2 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2)}} = 0$$

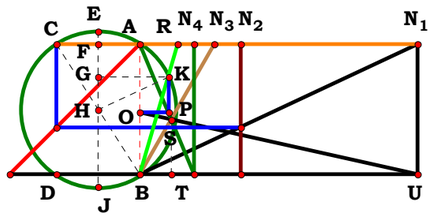
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot A \cdot N_u^2 \cdot (A + D)}{B \cdot C \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot (A^2 + 6 \cdot A \cdot D + D^2) - 2 \cdot A \cdot B \cdot (A + D)^2} - (A + D) \cdot (A - B)\right]} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot X^2 \cdot Y \cdot m \cdot (W \cdot p + Z \cdot m)}{n \cdot o \cdot \left[\sqrt{X^2 \cdot m^2 \cdot (W^2 \cdot p^2 + 6 \cdot W \cdot Z \cdot m \cdot p + Z^2 \cdot m^2) - 2 \cdot X \cdot W \cdot m \cdot n \cdot (W \cdot p + Z \cdot m)^2 + W^2 \cdot n^2 \cdot (W \cdot p + Z \cdot m)^2} + (W \cdot p + Z \cdot m) \cdot (W \cdot n - X \cdot m)\right]} = 0$$

4RST8AB1R0



$N_1 = 2.12828$
$N_2 = 0.77227$
$N_3 = 0.57360$
$N_4 = 0.41626$
$R = 0.29164$

Unit. $AB := 1$ Given. $N_1 := 2.12828$ $N_2 := .77227$ $N_3 := .57360$ $N_4 := .41626$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

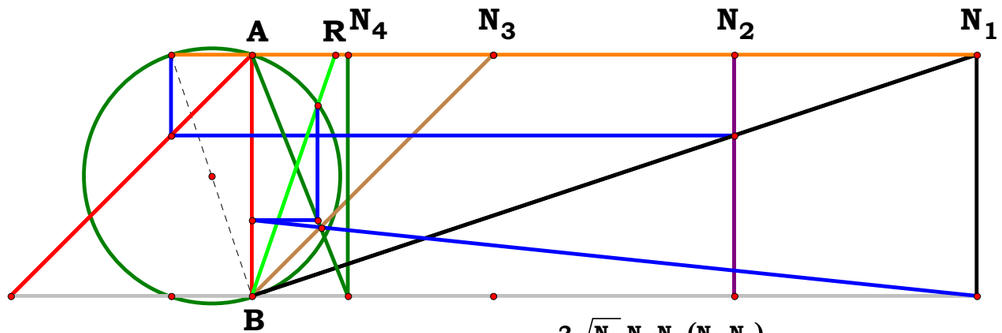
$AF := \frac{AC}{2}$ $HK := \frac{EJ}{2}$ $ST := \frac{N_4}{N_4 + N_3}$ $BT := N_3 \cdot ST$

$TU := N_1 - BT$ $BO := \frac{ST \cdot N_1}{TU}$ $OP := N_4 - N_4 \cdot BO$

$GK := AF + OP$ $GH := \sqrt{HK^2 - GK^2}$

$EG := HK - GH$ $GJ := EJ - EG$

$R := \frac{OP}{GJ - EF}$ $R = 0.291643$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.40000$
$R = 0.34661$

$$\frac{2 \cdot \sqrt{N_1} \cdot N_3 \cdot N_4 \cdot (N_1 - N_4)}{\sqrt{N_1} \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4) + \sqrt{N_1^3 \cdot N_4^2 + N_3^2 \cdot (N_1 - 4 \cdot N_4 \cdot ((N_1 - N_2) + N_1 \cdot N_4)) \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot ((N_1 - 2 \cdot N_1 \cdot N_4) + 2 \cdot N_2 \cdot N_4)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_3 \cdot N_4 \cdot (N_1 - N_4)}{\sqrt{N_1} \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4) + \sqrt{N_1^3 \cdot N_4^2 + N_3^2 \cdot [N_1 - 4 \cdot N_4 \cdot (N_1 - N_2 + N_1 \cdot N_4)] \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot (N_1 - 2 \cdot N_1 \cdot N_4 + 2 \cdot N_2 \cdot N_4)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

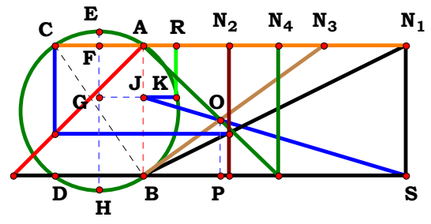
$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^3 \cdot (A - D) \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot D \cdot (A - C - D) - \sqrt{A} \cdot \sqrt{-N_u \cdot \left[4 \cdot B \cdot N_u^2 \cdot (A - D)^2 - B \cdot D^2 \cdot (C - A + D)^2 + 4 \cdot D \cdot N_u \cdot (A - B) \cdot (A - D) \cdot (C - A + D)\right]}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{W} \cdot Y \cdot Z \cdot (W \cdot p - Z \cdot m) \cdot \sqrt{m \cdot n}}{\sqrt{W^3 \cdot Z^2 \cdot n \cdot o^2 \cdot p^2 - Y^2 \cdot (W \cdot p - Z \cdot m)^2 \cdot \left(4 \cdot W \cdot Z^2 \cdot n - W \cdot n \cdot p^2 + 4 \cdot W \cdot Z \cdot n \cdot p - 4 \cdot X \cdot Z \cdot m \cdot p\right)} \ \ldots \ \cdot \sqrt{m} + \sqrt{m \cdot n} \cdot \sqrt{W} \cdot p \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

$+ \ -2 \cdot Y \cdot W \cdot Z \cdot o \cdot p \cdot (W \cdot p - Z \cdot m) \cdot (2 \cdot W \cdot Z \cdot n - 2 \cdot X \cdot Z \cdot m - W \cdot n \cdot p)$

4RST8AB1R1



$N_1 = 2.01205$
$N_2 = 0.65604$
$N_3 = 1.38720$
$N_4 = 1.03615$
$R = 0.25654$

Unit. $AB := 1$ Given. $N_1 := 2.01205$ $N_2 := .65604$ $N_3 := 1.38720$ $N_4 := 1.03615$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

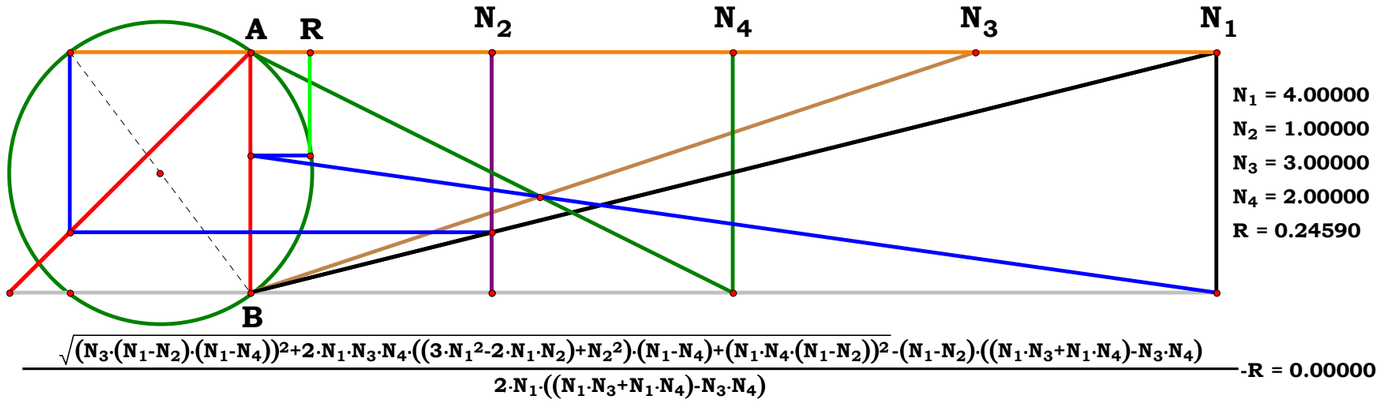
$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.256535$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 2.00000$
$R = 0.24590$

$$\frac{\sqrt{(N_3\cdot(N_1-N_2)\cdot(N_1-N_4))^2+2\cdot N_1\cdot N_3\cdot N_4\cdot((3\cdot N_1{}^2-2\cdot N_1\cdot N_2)+N_2{}^2)\cdot(N_1-N_4)+(N_1\cdot N_4\cdot(N_1-N_2))^2}-(N_1-N_2)\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)}{2\cdot N_1\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{AC^2\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)^2+4\cdot N_1\cdot N_3\cdot N_4\cdot\left(N_1-N_4\right)}-AC\cdot\sqrt{N_3{}^2\cdot\left(N_1-N_4\right)^2+2\cdot N_3\cdot N_1\cdot N_4\cdot\left(N_1-N_4\right)+N_1{}^2\cdot N_4{}^2}}{2\cdot\sqrt{N_3{}^2\cdot\left(N_1-N_4\right)^2+2\cdot N_3\cdot N_1\cdot N_4\cdot\left(N_1-N_4\right)+N_1{}^2\cdot N_4{}^2}} = 0$$

$$R - \frac{\sqrt{N_3{}^2\cdot\left(N_1-N_4\right)^2\cdot\left(N_1-N_2\right)^2+2\cdot N_1\cdot N_3\cdot N_4\cdot\left(3\cdot N_1{}^2-2\cdot N_1\cdot N_2+N_2{}^2\right)\cdot\left(N_1-N_4\right)+N_1{}^2\cdot N_4{}^2\cdot\left(N_1-N_2\right)^2}-\left(N_1-N_2\right)\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)}{2\cdot N_1\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

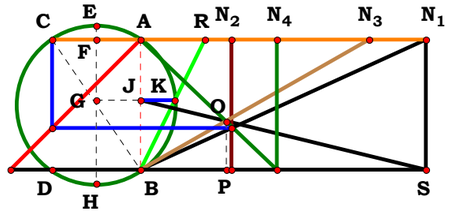
$$R - \frac{(A-C-D)\cdot(A-B)-\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{2\cdot B\cdot(A-C-D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2\cdot(W\cdot p-Z\cdot m)^2\cdot(W\cdot n-X\cdot m)^2+2\cdot Y\cdot W\cdot Z\cdot o\cdot\left(3\cdot W^2\cdot n^2-2\cdot W\cdot X\cdot m\cdot n+X^2\cdot m^2\right)\cdot(W\cdot p-Z\cdot m)+W^2\cdot Z^2\cdot o^2\cdot(W\cdot n-X\cdot m)^2}\ \ldots}{+\ -Z\cdot(W\cdot o-Y\cdot m)\cdot(W\cdot n-X\cdot m)-W\cdot Y\cdot p\cdot(W\cdot n-X\cdot m)} = 0$$

$$2\cdot W\cdot n\cdot(W\cdot Y\cdot p+W\cdot Z\cdot o-Y\cdot Z\cdot m)$$

4RST8AB1R2



$N_1 = 2.18639$
$N_2 = 0.69478$
$N_3 = 1.75526$
$N_4 = 1.04584$
$R = 0.49374$

Unit. $AB := 1$ Given. $N_1 := 2.18639$ $N_2 := .69478$ $N_3 := 1.75526$ $N_4 := 1.04584$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

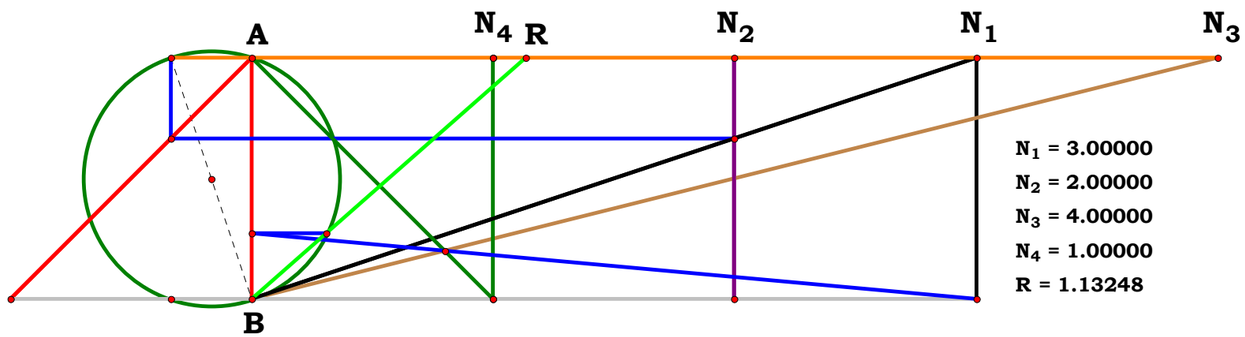
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$ $GH := BJ + EF$

$GK := \sqrt{GH \cdot (EH - GH)}$ $R := \frac{GK - AF}{BJ}$ $R = 0.493733$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$R = 1.13248$

$$\frac{\sqrt{(N_1-N_2)^2\cdot(N_3^2\cdot(N_1-N_4)^2+N_1^2\cdot N_4^2)+2\cdot N_1\cdot N_3\cdot N_4\cdot((3\cdot N_1^2-2\cdot N_1\cdot N_2)+N_2^2)\cdot(N_1-N_4)}-(N_1-N_2)\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)}{2\cdot N_1^2\cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{AC^2\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)^2+4\cdot N_1\cdot N_3\cdot N_4\cdot\left(N_1-N_4\right)}-AC\cdot\sqrt{\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)^2}\right]\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)}{2\cdot N_1\cdot N_4\cdot\sqrt{\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)^2}} = 0$$

$$R - \frac{\sqrt{\left(N_1-N_2\right)^2\cdot\left[N_3^2\cdot\left(N_1-N_4\right)^2+N_1^2\cdot N_4^2\right]+2\cdot N_1\cdot N_3\cdot N_4\cdot\left(3\cdot N_1^2-2\cdot N_1\cdot N_2+N_2^2\right)\cdot\left(N_1-N_4\right)}-\left(N_1-N_2\right)\cdot\left(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4\right)}{2\cdot N_1^2\cdot N_4} = 0$$

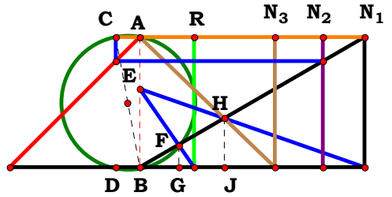
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(C-A+D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2-2\cdot C\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)\cdot(A-D)+(A-D)^2\cdot(A-B)^2}}{2\cdot B\cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2\cdot(W\cdot p-Z\cdot m)^2\cdot(W\cdot n-X\cdot m)^2+W\cdot Z\cdot o\cdot\left[2\cdot Y\cdot\left(3\cdot W^2\cdot n^2-2\cdot W\cdot X\cdot m\cdot n+X^2\cdot m^2\right)\cdot(W\cdot p-Z\cdot m)+W\cdot Z\cdot o\cdot(W\cdot n-X\cdot m)^2\right]}-(W\cdot Y\cdot p+W\cdot Z\cdot o-Y\cdot Z\cdot m)\cdot(W\cdot n-X\cdot m)}{2\cdot W^2\cdot Z\cdot n\cdot o} = 0$$

4RST8AB1R4



$N_1 = 1.72148$
$N_2 = 1.40185$
$N_3 = 1.03851$
$R = 0.41304$

Unit. $AB := 1$ **Given.** $N_1 := 1.72148$ $N_2 := 1.40185$ $N_3 := 1.03851$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

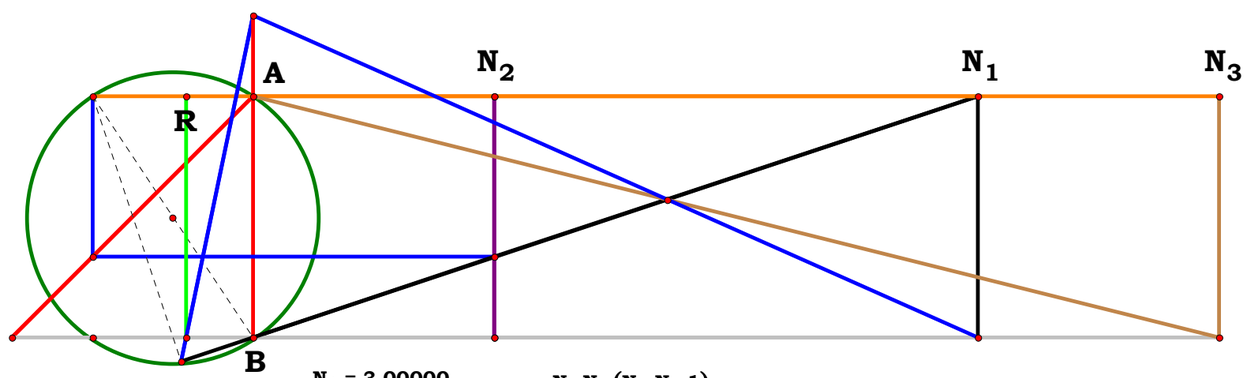
Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad HJ := \frac{N_3}{N_1 + N_3} \qquad BJ := N_1 \cdot HJ$$

$$BN_1 := \sqrt{AB^2 + N_1{}^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BE := \frac{HJ \cdot N_1}{N_1 - BJ} \qquad R := \frac{BE \cdot BG}{BE - FG} \qquad R = 0.413038$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$R = -0.27907$

$$\frac{N_1 \cdot N_3 \cdot (N_1 - N_2 - 1)}{(N_1 - N_3 - N_1{}^2 \cdot N_3 - N_1{}^2) + N_1 \cdot N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot (AC \cdot N_1 - 1)}{N_1 - N_3 - N_1{}^2 \cdot N_3 - AC \cdot N_1{}^2} = 0$$

$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_2 - 1)}{N_1 - N_3 - N_1{}^2 \cdot N_3 - N_1{}^2 + N_1 \cdot N_2} = 0$$

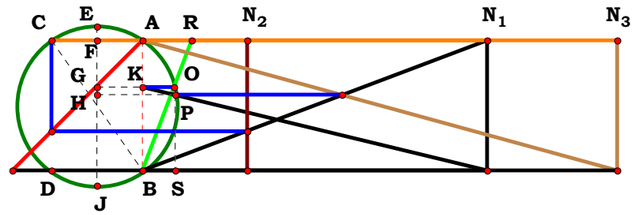
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot [A \cdot B + N_u \cdot (A - B)]}{A \cdot B \cdot (A - C) - N_u \cdot [C \cdot (A - B) - B \cdot N_u]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Z \cdot (Y \cdot o - X \cdot p + o \cdot p)}{X^2 \cdot p \cdot (Z + q) - X \cdot o \cdot q \cdot (Y + p) + Z \cdot o^2 \cdot p} = 0$$

4RST8AB1R5



$N_1 = 2.64163$
$N_2 = 0.80133$
$N_3 = 3.64399$
$R = 0.38058$

Unit. $AB := 1$ **Given.** $N_1 := 2.64163$ $N_2 := .80133$ $N_3 := 3.64399$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

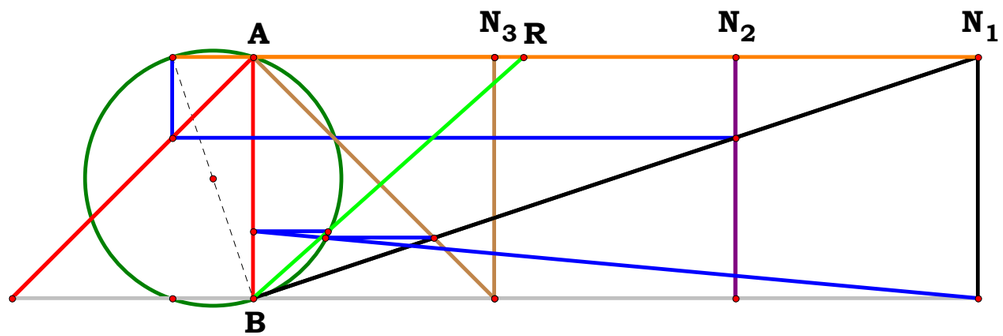
$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$

$$R := \frac{KO}{BK} \qquad R = 0.380582$$



$N_1 = 3.00000$ $AB = 1.00000$ $EF = 0.02705$ $BS = 0.29731$ $KO = 0.31111$
$N_2 = 2.00000$ $AC = 0.33333$ $PS = 0.25000$ $BK = 0.27750$ $R - \frac{KO}{BK} = 0.00000$
$N_3 = 1.00000$ $EJ = 1.05409$ $HJ = 0.27705$ $GJ = 0.30455$
$R = 1.12112$ $AF = 0.16667$ $HP = 0.46398$ $GO = 0.47778$

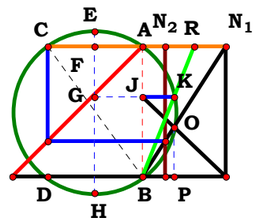
Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

4RST8AB1R6



$N_1 = 0.63667$
$N_2 = 0.17175$
$R = 0.39564$

Unit. $AB := 1$ Given. $N_1 := .63667$ $N_2 := .17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

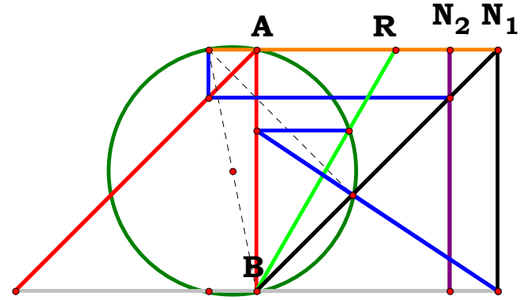
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BO := BN_1 - ON_1$

$BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$ $BJ := \frac{OP \cdot N_1}{N_1 - BP}$ $GH := BJ + EF$

$GK := \sqrt{GH \cdot (EH - GH)}$ $JK := GK - AF$ $R := \frac{JK}{BJ}$ $R = 0.395642$



$N_1 = 1.00000$
$N_2 = 0.80000$
$R = 0.57284$

$$\frac{((N_1^2+N_1)-N_2)\cdot(N_1-N_2)-\sqrt{(((N_1^6-N_1^4\cdot(N_2+1)\cdot((2\cdot N_1-N_2)+3))+6\cdot N_1^3\cdot(N_2^2+2\cdot N_2+2))-2\cdot N_1^2\cdot(N_2^3+N_2^2+6\cdot N_2+2))+N_2^3\cdot(N_2-4\cdot N_1)}}{2\cdot N_1\cdot(N_1-N_2-1)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot (AC + N_1) \cdot \left[AC \cdot \sqrt{N_1^2 \cdot (AC + N_1)^2} - \sqrt{N_1^2 \cdot AC^4 + AC^2 \cdot N_1^2 \cdot (N_1^2 + 2 \cdot AC \cdot N_1 - 8) - 4 \cdot AC \cdot N_1 \cdot (N_1^2 - 3) + 4 \cdot N_1^2 - 4}\right]}{2 \cdot (AC \cdot N_1 - 1) \cdot \sqrt{N_1^2 \cdot (AC + N_1)^2}} = 0$$

$$R - \frac{(N_1^2 + N_1 - N_2) \cdot (N_1 - N_2) - \sqrt{N_1^6 - N_1^4 \cdot (N_2 + 1) \cdot (2 \cdot N_1 - N_2 + 3) + 6 \cdot N_1^3 \cdot (N_2^2 + 2 \cdot N_2 + 2) - 2 \cdot N_1^2 \cdot (N_2^3 + N_2^2 + 6 \cdot N_2 + 2) + N_2^3 \cdot (N_2 - 4 \cdot N_1)}}{2 \cdot N_1 \cdot (N_1 - N_2 - 1)} = 0$$

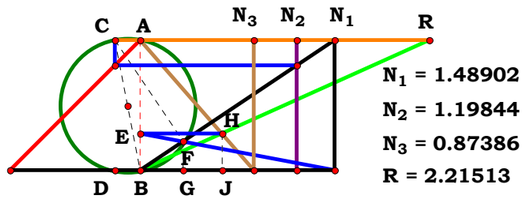
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{B^2 \cdot N_u^4 \cdot (A - B)^2 + \left[2 \cdot A \cdot B \cdot N_u^3 \cdot (2 \cdot A \cdot B - A^2 + B^2) - 12 \cdot A^3 \cdot B^3 \cdot N_u\right] \cdot (A - B) + A^2 \cdot N_u^2 \cdot (A^2 - 3 \cdot B^2) \cdot (A^2 - 4 \cdot A \cdot B + B^2) - 4 \cdot A^4 \cdot B^4} - N_u \cdot (A - B) \cdot (A^2 - B \cdot A - B \cdot N_u)}{2 \cdot A \cdot B \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{(q \cdot Y^2 + q \cdot Y \cdot p - Z \cdot p^2) \cdot (Y \cdot q - Z \cdot p) - \sqrt{\begin{matrix} q^4 \cdot Y^6 - 2 \cdot Y^5 \cdot p \cdot q^3 \cdot (Z + q) + Y^4 \cdot p^2 \cdot q^2 \cdot (Z + q) \cdot (Z - 3 \cdot q) + 6 \cdot Y^3 \cdot p^3 \cdot q^2 \cdot (Z^2 + 2 \cdot Z \cdot q + 2 \cdot q^2) \ldots \\ + -2 \cdot Y^2 \cdot p^4 \cdot q \cdot (Z^3 + Z^2 \cdot q + 6 \cdot Z \cdot q^2 + 2 \cdot q^3) + Z^3 \cdot p^5 \cdot (Z \cdot p - 4 \cdot Y \cdot q) \end{matrix}}}{2 \cdot Y \cdot p \cdot q \cdot (Y \cdot q - Z \cdot p - p \cdot q)} = 0$$

4RST8AB1R7



Unit. $AB := 1$ Given. $N_1 := 1.48902$ $N_2 := 1.19844$ $N_3 := .87386$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

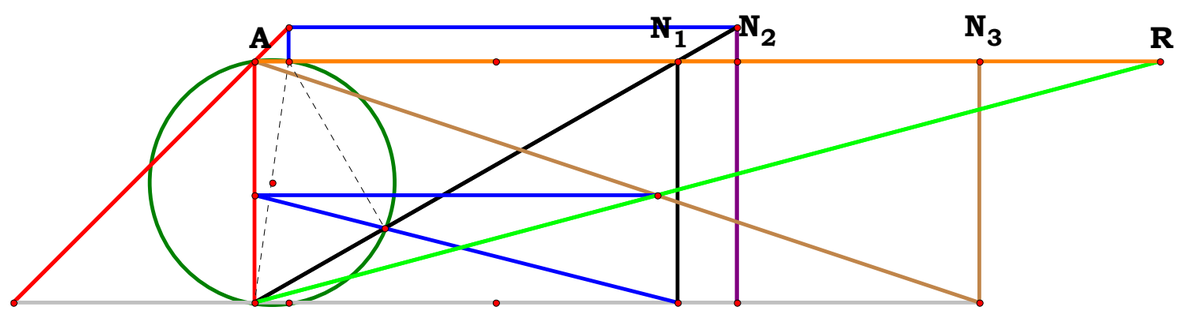
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_1 := \sqrt{AB^2 + N_1^2}$ $FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$

$BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $BJ := N_3 \cdot (AB - BE)$

$R := \frac{BJ}{BE}$ $R = 2.215187$



Definitions.

$$R - \frac{N_3 \cdot (N_1^2 + 2 \cdot AC \cdot N_1 - 1)}{1 - AC \cdot N_1} = 0$$

$$R - \frac{N_3 \cdot (N_1^2 + 2 \cdot N_1 - 2 \cdot N_2 - 1)}{N_2 - N_1 + 1} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{B \cdot N_u^3 - A \cdot N_u \cdot [A \cdot B + 2 \cdot N_u \cdot (A - B)]}{A \cdot C \cdot [A \cdot B + N_u \cdot (A - B)]} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

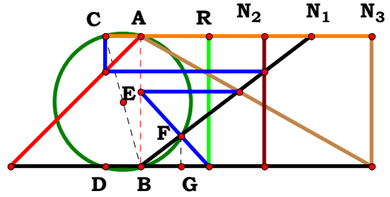
$$R - \frac{X \cdot Z \cdot p \cdot (X + 2 \cdot o) - Z \cdot o^2 \cdot (2 \cdot Y + p)}{o \cdot q \cdot (Y \cdot o - X \cdot p + o \cdot p)} = 0$$

B

$N_1 = 1.75000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$R = 3.75000$

$\frac{N_3 \cdot ((N_1^2 + 2 \cdot (N_1 - N_2)) - 1)}{(N_2 - N_1) + 1} - R = 0.00000$

4RST8AB1R8



$N_1 = 1.30499$
$N_2 = 0.94661$
$N_3 = 1.77463$
$R = 0.52676$

Unit. $AB := 1$ Given. $N_1 := 1.30499$ $N_2 := .94661$ $N_3 := 1.77463$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BE := \frac{N_3}{N_1 + N_3}$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1}$$

$$FG := \frac{BG}{N_1} \qquad R := \frac{BG \cdot BE}{BE - FG} \qquad R = 0.526755$$

Definitions.

$$R - \frac{N_3 - AC \cdot N_1 \cdot N_3}{AC \cdot N_1 + AC \cdot N_3 + N_1 \cdot N_3 - 1} = 0$$

$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_2 - 1)}{N_1 - N_3 \cdot (N_1^2 + N_1 - N_2) - N_1 \cdot (N_1 - N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

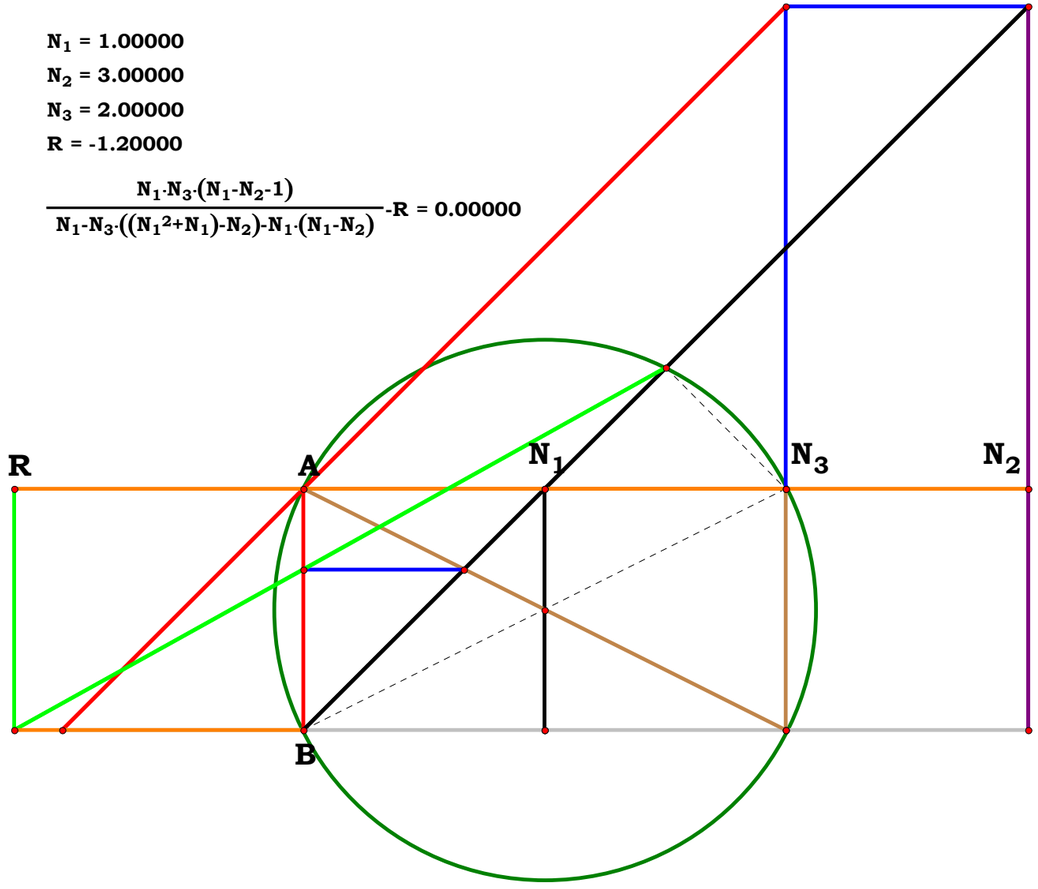
$$R - \frac{N_u \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)}{B \cdot N_u^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

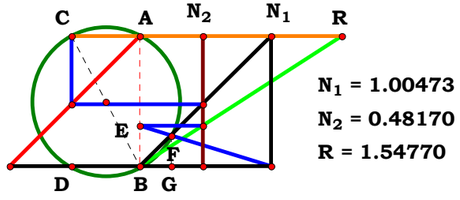
$$R - \frac{X \cdot Z \cdot (X \cdot p - Y \cdot o - o \cdot p)}{X \cdot o \cdot (Y \cdot q - Z \cdot p + p \cdot q) + Y \cdot Z \cdot o^2 - X^2 \cdot p \cdot (Z + q)} = 0$$

$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$R = -1.20000$

$$\frac{N_1 \cdot N_3 \cdot (N_1 - N_2 - 1)}{N_1 - N_3 \cdot ((N_1^2 + N_1) - N_2) - N_1 \cdot (N_1 - N_2)} - R = 0.00000$$



4RST8AB1R9



$N_1 = 1.00473$
$N_2 = 0.48170$
$R = 1.54770$

Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := .86913$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

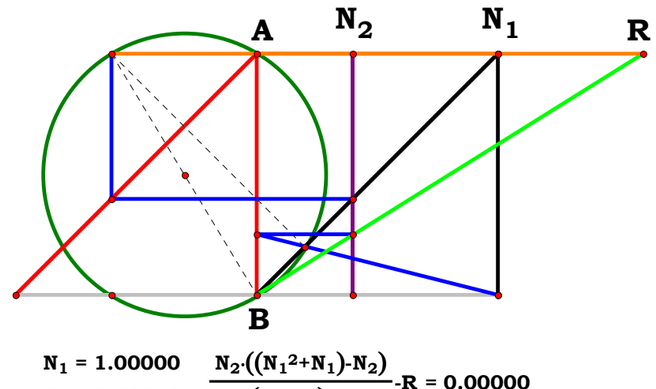
Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BN_1 := \sqrt{AB^2 + N_1{}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BE := \frac{FG \cdot N_1}{N_1 - BG} \qquad R := \frac{N_2}{BE} \qquad R = 2.444383$$



$N_1 = 1.00000$
$N_2 = 0.40000$
$R = 1.60000$

$$\frac{N_2 \cdot ((N_1{}^2 + N_1) - N_2)}{(N_2 - N_1) + 1} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot (AC + N_1)}{1 - AC \cdot N_1} = 0$$

$$R - \frac{N_2 \cdot (N_1{}^2 + N_1 - N_2)}{N_2 - N_1 + 1} = 0$$

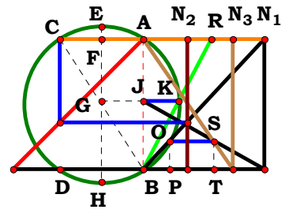
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u{}^2 \cdot (B \cdot A - A^2 + B \cdot N_u)}{A \cdot B \cdot [A \cdot B + N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (q \cdot Y^2 + q \cdot Y \cdot p - Z \cdot p^2)}{p \cdot q \cdot (Z \cdot p - Y \cdot q + p \cdot q)} = 0$$

4RST8AB1R10



$N_1 = 0.92724$
$N_2 = 0.33641$
$N_3 = 0.68983$
$R = 0.52232$

Unit. $AB := 1$ Given. $N_1 := .92724$ $N_2 := .33641$ $N_3 := .68983$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

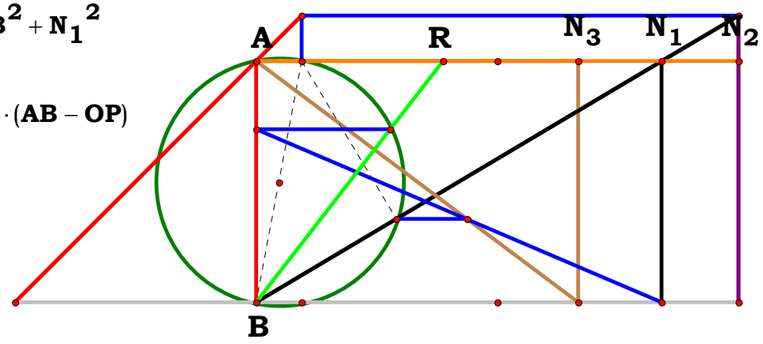
Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BO := BN_1 - ON_1$ $BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$ $BT := N_3 \cdot (AB - OP)$

$BJ := \frac{OP \cdot N_1}{N_1 - BT}$ $GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GK - AF}{BJ}$ $R = 0.52231$



$N_1 = 1.67976$
$N_2 = 2.00000$
$N_3 = 1.33325$
$R = 0.77165$

$$\frac{(N_1-N_2)\cdot((((N_1-N_1^2\cdot N_3)+N_1^3)-N_1\cdot N_3)+N_2\cdot N_3)-\sqrt{((N_3^2\cdot((N_1^2+N_1)-N_2)^2\cdot(N_1-N_2)^2)+(N_1^2\cdot((N_2-N_1-N_1^2\cdot N_2-2\cdot N_1^2)+N_1^3)^2))-(2\cdot N_1\cdot N_3\cdot((N_1^2+N_1)-N_2)\cdot(((N_1^4-2\cdot N_1^3\cdot(N_2+1))+N_1^2\cdot(N_2^2+2\cdot N_2+3))-N_2\cdot(2\cdot N_1-N_2)))}{2\cdot N_1^2\cdot(N_1-N_2-1)} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\begin{array}{l} 2\cdot\sqrt{N_3^2\cdot AC^4+-2\cdot AC^3\cdot N_3\cdot\left(N_1^2-N_3\cdot N_1+1\right)+AC^2\cdot\left(N_1^2-N_3\cdot N_1-1\right)^2-4\cdot\left(N_1-N_3\right)\cdot\left(AC\cdot N_1^2-N_1-AC\right)}\ \ldots \\ +\ -AC\cdot\sqrt{4\cdot\left(N_1^2-N_1\cdot N_3-AC\cdot N_3+1\right)^2} \end{array}\right]\cdot\left(N_1\cdot N_3-N_1^2+AC\cdot N_3-1\right)}{2\cdot\sqrt{4\cdot\left(N_1^2-N_1\cdot N_3-AC\cdot N_3+1\right)^2}\cdot\left(AC\cdot N_1-1\right)} = 0$$

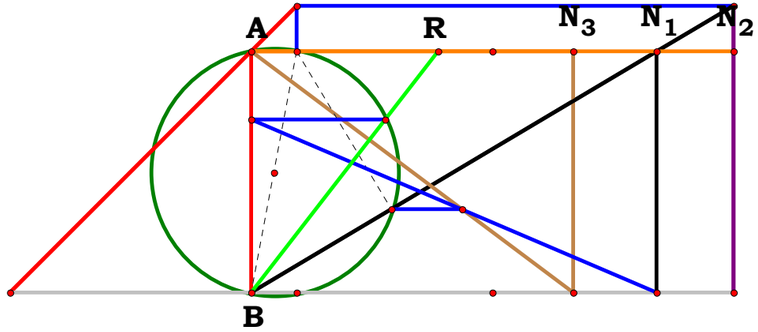
$$R - \frac{\left(N_1-N_2\right)\cdot\left(N_1-N_1^2\cdot N_3+N_1^3-N_1\cdot N_3+N_2\cdot N_3\right)-\sqrt{\begin{array}{l} N_3^2\cdot\left(N_1^2+N_1-N_2\right)^2\cdot\left(N_1-N_2\right)^2+N_1^2\cdot\left(N_2-N_1-N_1^2\cdot N_2-2\cdot N_1^2+N_1^3\right)^2\ \ldots \\ +\ -2\cdot N_1\cdot N_3\cdot\left(N_1^2+N_1-N_2\right)\cdot\left[N_1^4-2\cdot N_1^3\cdot\left(N_2+1\right)+N_1^2\cdot\left(N_2^2+2\cdot N_2+3\right)-N_2\cdot\left(2\cdot N_1-N_2\right)\right] \end{array}}}{2\cdot N_1^2\cdot\left(N_1-N_2-1\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{\begin{array}{l} B^2\cdot C^2\cdot\left[N_u^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot A\cdot B\cdot C\cdot N_u\cdot\left(B\cdot A-A^2+B\cdot N_u\right)\cdot\left[N_u^2\cdot(A-B)^2+A^2\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)+2\cdot A\cdot B\cdot N_u\cdot(A-B)\right] \end{array}} + (A-B)\cdot\left[(B\cdot C-A\cdot B)\cdot N_u^2+\left(A^3-A^2\cdot B\right)\cdot N_u+A^2\cdot B\cdot C\right]}{2\cdot A\cdot B\cdot C\cdot\left(A\cdot B+A\cdot N_u-B\cdot N_u\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{(X\cdot p - Y\cdot o)\cdot\left[X\cdot p\cdot q\cdot\left(X^2+o^2\right) - Z\cdot o\cdot\left(p\cdot X^2 + p\cdot X\cdot o - Y\cdot o^2\right)\right] - \sqrt{\begin{matrix} Z^2\cdot o^2\cdot\left(p\cdot X^2 + p\cdot X\cdot o - Y\cdot o^2\right)^2\cdot(X\cdot p - Y\cdot o)^2 \ \ldots \\ +\ -2\cdot Z\cdot X\cdot o\cdot p\cdot q\cdot\left(p\cdot X^2 + p\cdot X\cdot o - Y\cdot o^2\right)\cdot\left(\begin{matrix} X^4\cdot p^2 - 2\cdot X^3\cdot Y\cdot o\cdot p - 2\cdot X^3\cdot o\cdot p^2 + X^2\cdot Y^2\cdot o^2 \ \ldots \\ +\ 2\cdot X^2\cdot Y\cdot o^2\cdot p + 3\cdot X^2\cdot o^2\cdot p^2 - 2\cdot X\cdot Y\cdot o^3\cdot p + Y^2\cdot o^4 \end{matrix}\right) \ \ldots \\ +\ X^2\cdot p^2\cdot q^2\cdot\left(Y\cdot o^3 + X^3\cdot p - X^2\cdot Y\cdot o - X\cdot o^2\cdot p - 2\cdot X^2\cdot o\cdot p\right)^2 \end{matrix}}}{2\cdot X^2\cdot o\cdot p\cdot q\cdot(X\cdot p - Y\cdot o - o\cdot p)} = 0$$



$N_1 = 1.67976$

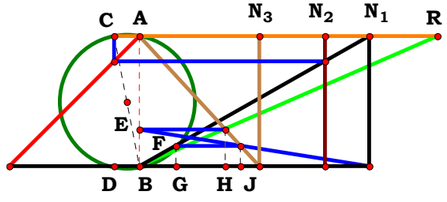
$N_2 = 2.00000$

$N_3 = 1.33325$

$R = 0.77165$

$$\frac{(N_1-N_2)\cdot((((N_1-N_1^2\cdot N_3)+N_1^3)-N_1\cdot N_3)+N_2\cdot N_3)-\sqrt{((N_3^2\cdot((N_1^2+N_1)-N_2)^2\cdot(N_1-N_2)^2)+(N_1^2\cdot((N_2-N_1-N_1^2\cdot N_2-2\cdot N_1^2)+N_1^3)^2))-(2\cdot N_1\cdot N_3\cdot((N_1^2+N_1)-N_2)\cdot(((N_1^4-2\cdot N_1^3\cdot(N_2+1))+N_1^2\cdot(N_2^2+2\cdot N_2+3))-N_2\cdot(2\cdot N_1-N_2)))}}{2\cdot N_1^2\cdot(N_1-N_2-1)} - R = 0.00000$$

4RST8AB1R11



$N_1 = 1.76022$

$N_2 = 1.42122$

$N_3 = 0.92228$

$R = 2.28316$

Unit. $AB := 1$ Given. $N_1 := 1.76022$ $N_2 := 1.42122$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BN_1 := \sqrt{AB^2 + {N_1}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BJ := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BJ}$$

$$BH := N_3 \cdot (AB - BE) \qquad R := \frac{BH}{BE} \qquad R = 2.283148$$

Definitions.

$$R - \frac{N_3 \cdot (AC + N_1) \cdot (N_1 - N_3)}{1 - AC \cdot N_1} = 0$$

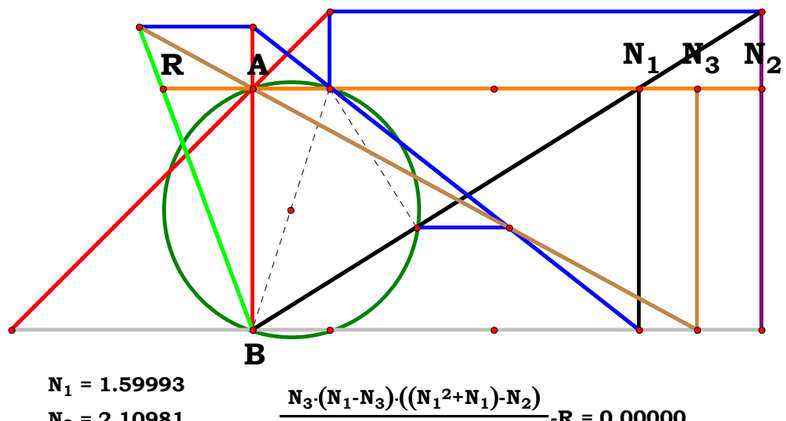
$$R - \frac{N_3 \cdot (N_1 - N_3) \cdot ({N_1}^2 + N_1 - N_2)}{N_1 \cdot (N_2 - N_1 + 1)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{{N_u}^2 \cdot (A - C) \cdot (A^2 - B \cdot A - B \cdot N_u)}{A \cdot C^2 \cdot [A \cdot B + N_u \cdot (A - B)]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (X \cdot q - Z \cdot o) \cdot (p \cdot X^2 + p \cdot X \cdot o - Y \cdot o^2)}{X \cdot o \cdot q^2 \cdot (Y \cdot o - X \cdot p + o \cdot p)} = 0$$



$N_1 = 1.59993$

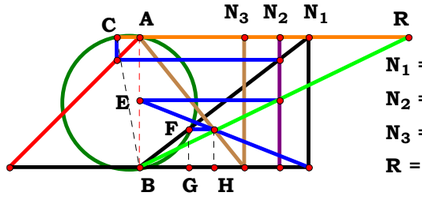
$N_2 = 2.10981$

$N_3 = 1.83918$

$R = -0.37340$

$$\frac{N_3 \cdot (N_1 - N_3) \cdot (({N_1}^2 + N_1) - N_2)}{N_1 \cdot ((N_2 - N_1) + 1)} - R = 0.00000$$

4RST8AB1R12



$N_1 = 1.29530$
$N_2 = 1.07253$
$N_3 = 0.80606$
$R = 2.06314$

Unit. $AB := 1$ **Given.** $N_1 := 1.29530$ $N_2 := 1.07253$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BN_1 := \sqrt{AB^2 + {N_1}^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BH := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BH}$$

$$R := \frac{N_2}{BE} \qquad R = 2.063124$$

Definitions.

$$R - \frac{N_2 \cdot \left(N_1 \cdot N_3 - {N_1}^2 + AC \cdot N_3 - 1\right)}{AC \cdot N_1 - 1} = 0$$

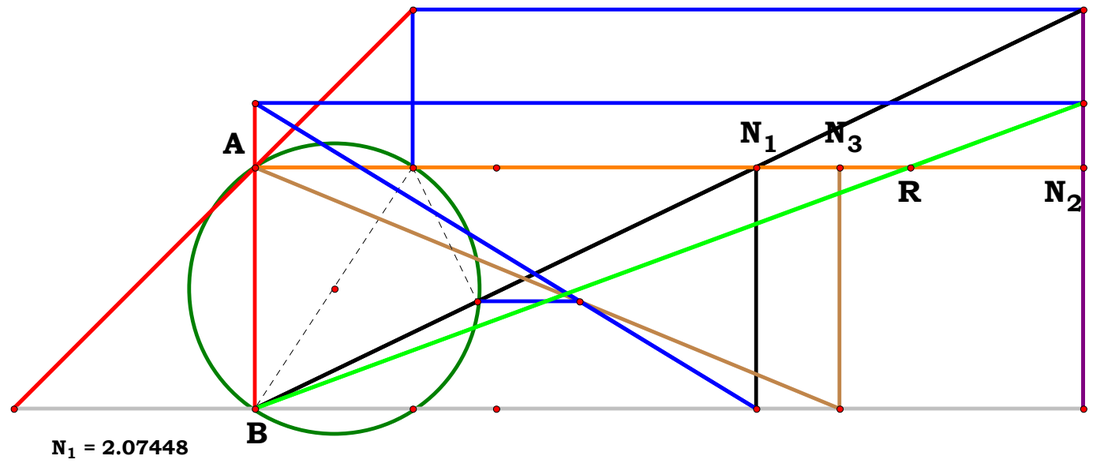
$$R - \frac{N_2 \cdot \left(N_1 - {N_1}^2 \cdot N_3 + {N_1}^3 - N_1 \cdot N_3 + N_2 \cdot N_3\right)}{N_1 \cdot \left(N_2 - N_1 + 1\right)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{{N_u}^2 \cdot A^2 \cdot (A - B) - {N_u}^3 \cdot B \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u}{A \cdot B \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

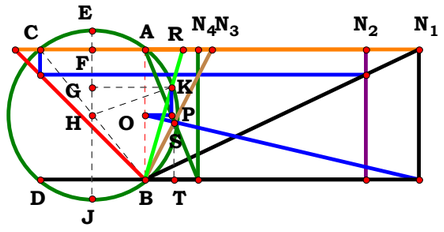
$$R - \frac{Y \cdot \left[X \cdot p \cdot q \cdot \left(X^2 + o^2\right) - Z \cdot o \cdot \left(p \cdot X^2 + p \cdot X \cdot o - Y \cdot o^2\right)\right]}{X \cdot o \cdot p \cdot q \cdot (Y \cdot o - X \cdot p + o \cdot p)} = 0$$



$N_1 = 2.07448$
$N_2 = 3.43272$
$N_3 = 2.42227$
$R = 2.71399$

$$\frac{N_2 \cdot ((((N_1 - {N_1}^2 \cdot N_3) + {N_1}^3) - N_1 \cdot N_3) + N_2 \cdot N_3)}{N_1 \cdot ((N_2 - N_1) + 1)} - R = 0.00000$$

4RST8AB2R0



$N_1 = 2.09922$
$N_2 = 1.69242$
$N_3 = 0.51548$
$N_4 = 0.40657$
$R = 0.29150$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.69242$ $N_3 := .51548$ $N_4 := .40657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

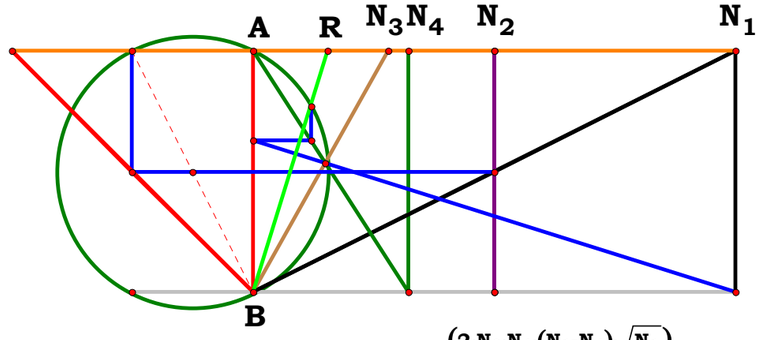
$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $HK := \frac{EJ}{2}$ $ST := \frac{N_4}{N_4 + N_3}$ $BT := N_3 \cdot ST$

$TU := N_1 - BT$ $BO := \frac{ST \cdot N_1}{TU}$ $OP := N_4 - N_4 \cdot BO$

$GK := AF + OP$ $GH := \sqrt{HK^2 - GK^2}$ $EG := HK - GH$

$GJ := EJ - EG$ $R := \frac{OP}{GJ - EF}$ $R = 0.291496$



$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 0.56205$
$N_4 = 0.64118$
$R = 0.31070$

$$\frac{\left(2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot \sqrt{N_1}\right)}{\left(\left((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4\right) \cdot \sqrt{N_1}\right) + \sqrt{\left(2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - 2 \cdot N_2 \cdot N_4) \cdot (N_1 - N_4) - N_3^2 \cdot (N_1 - N_4)^2 \cdot \left((4 \cdot N_1 \cdot N_4^2 + 4 \cdot N_2 \cdot N_4) - N_1\right)\right) + N_1^3 \cdot N_4^2}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_3 \cdot N_4 \cdot (N_1 - N_4)}{\sqrt{N_1} \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4) + \sqrt{2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - 2 \cdot N_2 \cdot N_4) \cdot (N_1 - N_4) - N_3^2 \cdot (N_1 - N_4)^2 \cdot (4 \cdot N_1 \cdot N_4^2 + 4 \cdot N_2 \cdot N_4 - N_1) + N_1^3 \cdot N_4^2}} = 0$$

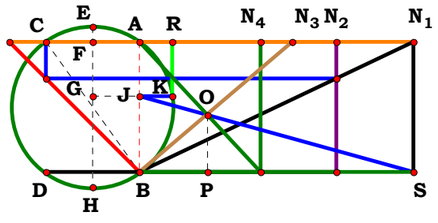
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^3 \cdot (A - D) \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot D \cdot (A - C - D) - \sqrt{A} \cdot \sqrt{N_u \cdot \left[B \cdot D^2 \cdot (C - A + D)^2 - 4 \cdot B \cdot N_u^2 \cdot (A - D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A - D) \cdot (C - A + D)\right]}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot \sqrt{W} \cdot Y \cdot Z \cdot \sqrt{n} \cdot (W \cdot p - Z \cdot m)}{\sqrt{2 \cdot Y \cdot W \cdot Z \cdot o \cdot p \cdot (W \cdot p - Z \cdot m) \cdot (W \cdot n \cdot p - 2 \cdot X \cdot Z \cdot m) - Y^2 \cdot (W \cdot p - Z \cdot m)^2 \cdot \left(4 \cdot W \cdot n \cdot Z^2 + 4 \cdot X \cdot m \cdot Z \cdot p - W \cdot n \cdot p^2\right) + W^3 \cdot Z^2 \cdot n \cdot o^2 \cdot p^2} + \sqrt{W} \cdot \sqrt{n} \cdot p \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB2R1



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 1.17412$
$N_4 = 0.92961$
$R = 0.25025$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := 1.17412$ $N_4 := .92961$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

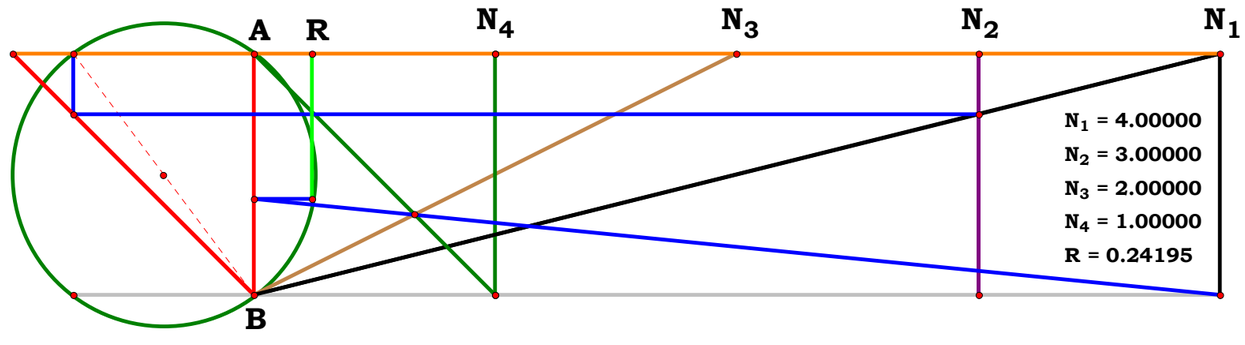
$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.250248$



$$\frac{\sqrt{(N_2 \cdot N_3 \cdot (N_1 - N_4))^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2) \cdot (N_1 - N_4) + (N_1 \cdot N_2 \cdot N_4)^2} - N_2 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)}{2 \cdot N_1 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)^2 + 4 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4)} - AC \cdot \sqrt{N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_3 \cdot N_1 \cdot N_4 \cdot (N_1 - N_4) + N_1^2 \cdot N_4^2}}{2 \cdot \sqrt{N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_3 \cdot N_1 \cdot N_4 \cdot (N_1 - N_4) + N_1^2 \cdot N_4^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2) \cdot (N_1 - N_4) + N_1^2 \cdot N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot N_1 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

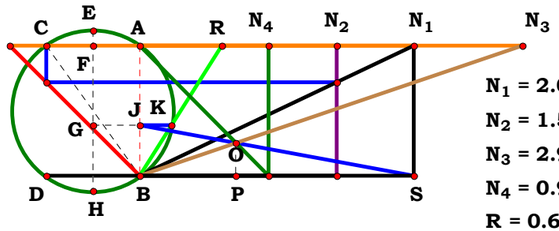
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot (C - A + D) - \sqrt{A^2 \cdot C^2 - 2 \cdot C \cdot (A^2 + 2 \cdot B^2) \cdot (A - D) + A^2 \cdot (A - D)^2}}{2 \cdot B \cdot (A - C - D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{X^2 \cdot m^2 \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)^2 + 4 \cdot W^3 \cdot Y \cdot Z \cdot n^2 \cdot o \cdot (W \cdot p - Z \cdot m)} - X \cdot m \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot W \cdot n \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB2R2



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 2.93693$
$N_4 = 0.98772$
$R = 0.63389$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := 2.93693$ $N_4 := .98772$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

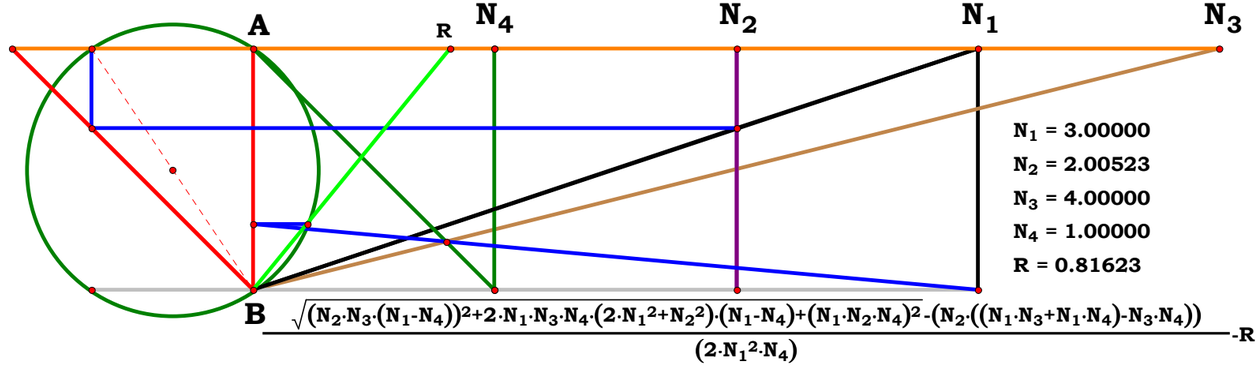
$AC := \frac{N_2}{N_1}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$ $GH := BJ + EF$

$EG := EH - GH$ $GK := \sqrt{EG \cdot GH}$ $R := \frac{GK - AF}{BJ}$

$R = 0.633886$



$N_1 = 3.00000$
$N_2 = 2.00523$
$N_3 = 4.00000$
$N_4 = 1.00000$
$R = 0.81623$

$$\frac{\sqrt{(N_2 \cdot N_3 \cdot (N_1 - N_4))^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2) \cdot (N_1 - N_4) + (N_1 \cdot N_2 \cdot N_4)^2} - (N_2 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))}{(2 \cdot N_1^2 \cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{N_2^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2) \cdot (N_1 - N_4) + N_1^2 \cdot N_2^2 \cdot N_4^2} \cdot N_1 - N_2 \cdot \sqrt{N_1^2} \cdot \sqrt{(N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)^2}\right] \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot N_1^2 \cdot N_4 \cdot \sqrt{N_1^2} \cdot \sqrt{(N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)^2}} = 0$$

$$R - \frac{\sqrt{N_2^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + N_2^2) \cdot (N_1 - N_4) + N_1^2 \cdot N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot N_1^2 \cdot N_4} = 0$$

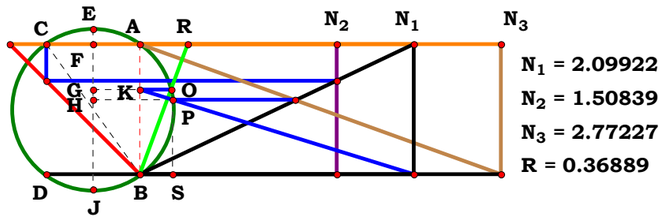
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot (A - C - D) + \sqrt{A^2 \cdot C^2 + A^2 \cdot (A - D)^2 - 2 \cdot C \cdot (A^2 + 2 \cdot B^2) \cdot (A - D)}}{2 \cdot B \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot X^2 \cdot m^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot (2 \cdot W^2 \cdot n^2 + X^2 \cdot m^2) \cdot (W \cdot p - Z \cdot m) + W^2 \cdot X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot m \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot W^2 \cdot Z \cdot n \cdot o} = 0$$

4RST8AB2R5



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 2.77227$
$R = 0.36889$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := 2.77227$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

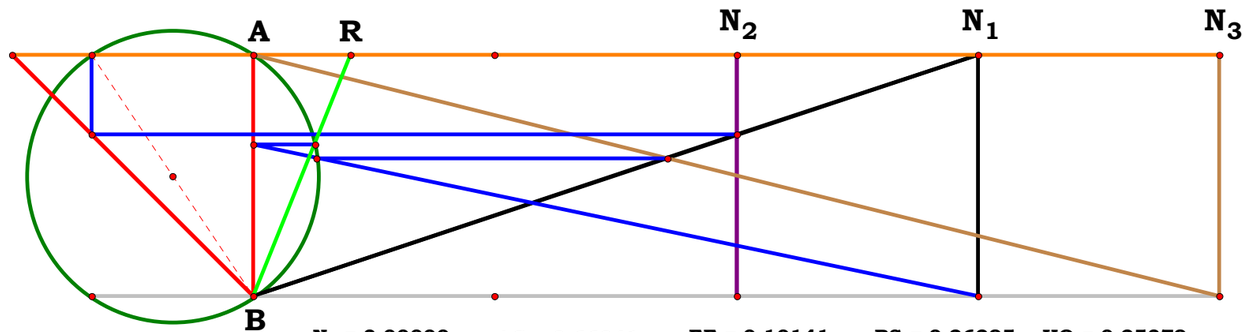
$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$

$$R := \frac{KO}{BK} \qquad R = 0.368893$$



$N_1 = 3.00000$ $AC = 0.66841$ $EF = 0.10141$ $BS = 0.26295$ $KO = 0.25379$
$N_2 = 2.00523$ $AB = 1.00000$ $PS = 0.57143$ $BK = 0.62633$ $R - \frac{KO}{BK} = 0.00000$
$N_3 = 4.00000$ $EJ = 1.20282$ $HJ = 0.67284$ $GJ = 0.72773$
$R = 0.40520$ $AF = 0.33420$ $HP = 0.59715$ $GO = 0.58799$

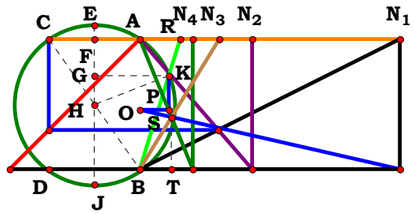
Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

4RST8AB3R0



$N_1 = 1.99268$
$N_2 = 0.85944$
$N_3 = 0.61234$
$N_4 = 0.40657$
$R = 0.31026$

Unit. $AB := 1$ Given. $N_1 := 1.99268$ $N_2 := .85944$ $N_3 := .61234$ $N_4 := .40657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

$AF := \frac{AC}{2}$ $HK := \frac{EJ}{2}$ $ST := \frac{N_4}{N_4 + N_3}$

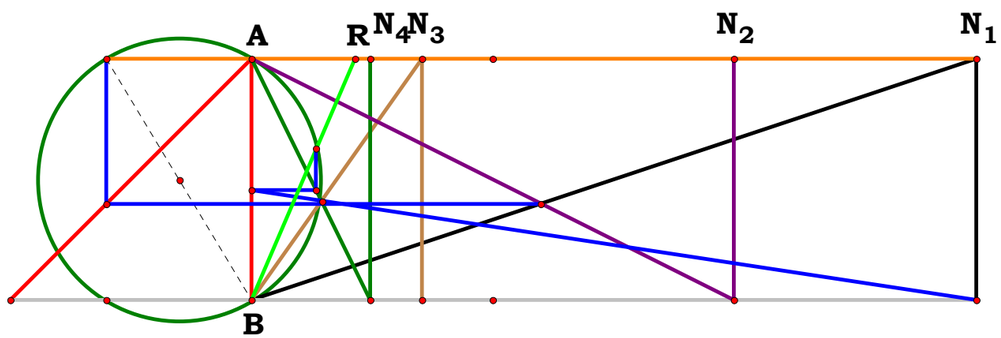
$BT := N_3 \cdot ST$ $TU := N_1 - BT$

$BO := \frac{ST \cdot N_1}{TU}$ $OP := N_4 - N_4 \cdot BO$

$GK := AF + OP$ $GH := \sqrt{HK^2 - GK^2}$

$EG := HK - GH$ $GJ := EJ - EG$

$R := \frac{OP}{GJ - EF}$ $R = 0.310256$



$N_1 = 3.00000$ $N_4 = 0.49279$
$N_2 = 2.00000$ $R = 0.42747$
$N_3 = 0.70718$

$$\frac{2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot \sqrt{(N_1 + N_2)}}{\sqrt{((N_3^2 \cdot (N_1 - N_4)^2 \cdot ((N_1 + N_2) - 4 \cdot N_4 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4))) - (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot (2 \cdot N_1 \cdot N_4 - N_2 - N_1))) + (N_1^2 \cdot N_4^2 \cdot (N_1 + N_2))} + ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4) \cdot \sqrt{(N_1 + N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_3 \cdot N_4 \cdot \sqrt{N_1 + N_2} \cdot (N_1 - N_4)}{\sqrt{N_3^2 \cdot (N_1 - N_4)^2 \cdot [N_1 + N_2 - 4 \cdot N_4 \cdot (N_1 + N_1 \cdot N_4 + N_2 \cdot N_4)] - 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot (2 \cdot N_1 \cdot N_4 - N_2 - N_1) + N_1^2 \cdot N_4^2 \cdot (N_1 + N_2)} + \sqrt{N_1 + N_2} \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

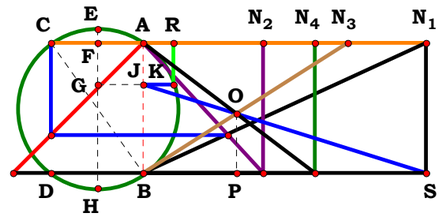
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A + B)} \cdot (A - D)}{\sqrt{N_u \cdot (A + B)} \cdot D \cdot (A - C - D) - \sqrt{N_u \cdot [D^2 \cdot (A + B) \cdot (C - A + D)^2 - 4 \cdot N_u^2 \cdot (A + B) \cdot (A - D)^2 + 4 \cdot B \cdot D \cdot N_u \cdot (A - D) \cdot (C - A + D)]}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2 \cdot Y \cdot Z \cdot \sqrt{W \cdot n + X \cdot m} \cdot (W \cdot p - Z \cdot m) \cdot \sqrt{m} \cdot \sqrt{n}}{\sqrt{\begin{matrix} W^2 \cdot Z^2 \cdot o^2 \cdot p^2 \cdot (W \cdot n + X \cdot m) - Y^2 \cdot (W \cdot p - Z \cdot m)^2 \cdot \left(\begin{matrix} 4 \cdot W \cdot Z^2 \cdot n + 4 \cdot X \cdot Z^2 \cdot m \ \ldots \\ + \ -W \cdot n \cdot p^2 - X \cdot m \cdot p^2 + 4 \cdot W \cdot Z \cdot n \cdot p \end{matrix}\right) \ \ldots \\ + \ -2 \cdot Y \cdot W \cdot Z \cdot o \cdot p \cdot (W \cdot p - Z \cdot m) \cdot (2 \cdot W \cdot Z \cdot n - W \cdot n \cdot p - X \cdot m \cdot p) \end{matrix}} \cdot \sqrt{m \cdot n} + \sqrt{W \cdot n + X \cdot m} \cdot \sqrt{n} \cdot \sqrt{m} \cdot p \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB3R1



$N_1 = 2.16702$
$N_2 = 0.91756$
$N_3 = 1.57123$
$N_4 = 1.31704$
$R = 0.23230$

Unit. $AB := 1$ Given. $N_1 := 2.16702$ $N_2 := .91756$ $N_3 := 1.57123$ $N_4 := 1.31704$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

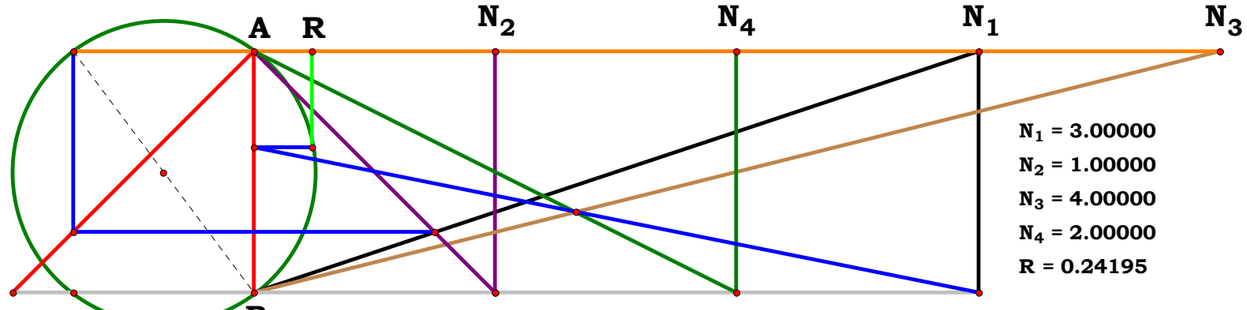
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.232295$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 2.00000$
$R = 0.24195$

$\frac{\sqrt{(N_1 \cdot N_3 \cdot (N_1 - N_4))^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot \left(3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2\right) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

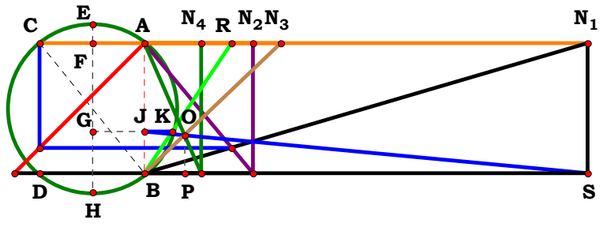
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + B^2 \cdot (A - D)^2 - 2 \cdot C \cdot (A - D) \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + 3 \cdot B^2)} + B \cdot (A - C - D)}{(A + B) \cdot (2 \cdot C - 2 \cdot A + 2 \cdot D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{\begin{matrix} Y^2 \cdot W^2 \cdot n^2 \cdot (W \cdot p - Z \cdot m)^2 \ \ldots \\ + \ 2 \cdot Y \cdot W \cdot Z \cdot o \cdot \left(3 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 2 \cdot X^2 \cdot m^2\right) \cdot (W \cdot p - Z \cdot m) + W^4 \cdot Z^2 \cdot n^2 \cdot o^2 \end{matrix}} - W \cdot n \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{(2 \cdot W \cdot n + 2 \cdot X \cdot m) \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB3R2



$N_1 = 3.39712$
$N_2 = 0.83038$
$N_3 = 1.04820$
$N_4 = 0.43563$
$R = 0.66502$

Unit. $AB := 1$ Given. $N_1 := 3.39712$ $N_2 := .83038$ $N_3 := 1.04820$ $N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

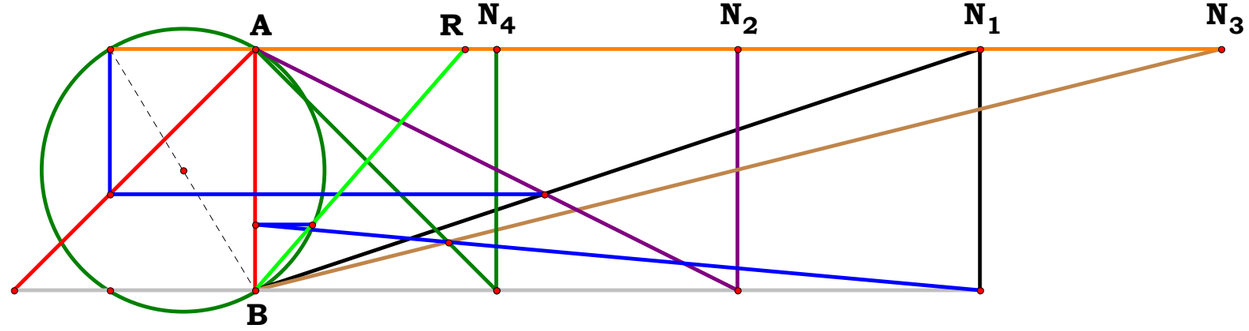
$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$ $GH := BJ + EF$

$EG := EH - GH$ $GK := \sqrt{EG \cdot GH}$

$R := \frac{GK - AF}{BJ}$ $R = 0.665024$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 1.00000$
$R = 0.86893$

Definitions.

$$\frac{\sqrt{(N_1 \cdot N_3 \cdot (N_1 - N_4))^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot N_1 \cdot N_4} - R = 0.00000$$

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot N_1 \cdot N_4} = 0$$

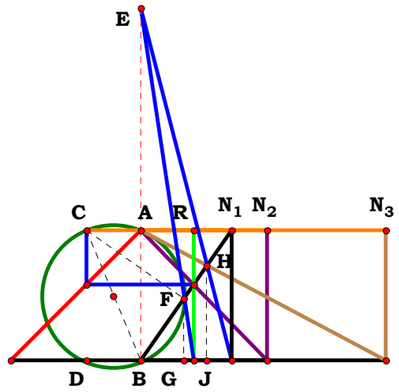
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{B^2 \cdot C^2 + B^2 \cdot (A - D)^2 - 2 \cdot C \cdot (A - D) \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + 3 \cdot B^2)} + B \cdot (A - C - D)}{2 \cdot C \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot W^2 \cdot n^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot (3 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 2 \cdot X^2 \cdot m^2) \cdot (W \cdot p - Z \cdot m) + W^4 \cdot Z^2 \cdot n^2 \cdot o^2} - W \cdot n \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot W \cdot Z \cdot o \cdot (W \cdot n + X \cdot m)} = 0$$

4RST8AB3R4



$N_1 = 0.69478$
$N_2 = 0.96599$
$N_3 = 1.88118$
$R = 0.40372$

Unit. $AB := 1$ **Given.** $N_1 := .69478$ $N_2 := .96599$ $N_3 := 1.88118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $HJ := \frac{N_3}{N_1 + N_3}$

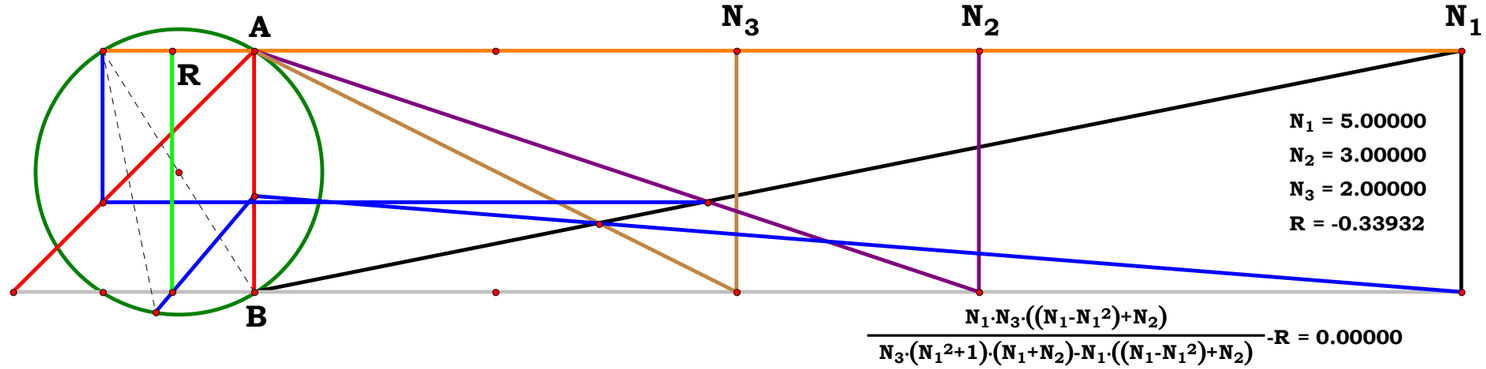
$BJ := N_1 \cdot HJ$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{HJ \cdot N_1}{N_1 - BJ}$ $R := \frac{BE \cdot BG}{BE - FG}$

$R = 0.403719$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$R = -0.33932$

$\frac{N_1 \cdot N_3 \cdot ((N_1 - N_1^2) + N_2)}{N_3 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) - N_1 \cdot ((N_1 - N_1^2) + N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_1^2 + N_2)}{N_3 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) - N_1 \cdot (N_1 - N_1^2 + N_2)} = 0$$

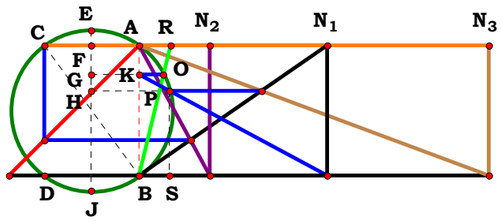
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot (A^2 + B \cdot A - B \cdot N_u)}{(A + B) \cdot N_u^2 + B \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Z \cdot (p \cdot X \cdot o - p \cdot X^2 + Y \cdot o^2)}{Z \cdot (X^2 + o^2) \cdot (X \cdot p + Y \cdot o) + X \cdot q \cdot (p \cdot X^2 - p \cdot X \cdot o - Y \cdot o^2)} = 0$$

4RST8AB3R5



N_1 = 1.44059
N_2 = 0.53981
N_3 = 2.68510
R = 0.24210

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := .53981$ $N_3 := 2.68510$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

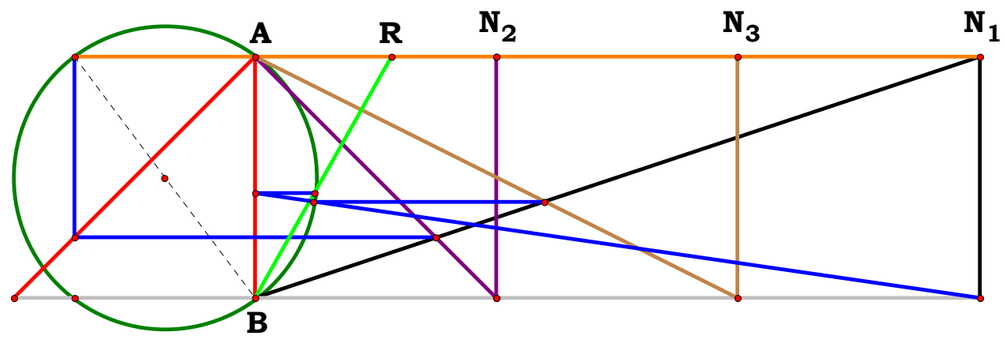
$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$

$$R := \frac{KO}{BK} \qquad R = 0.242104$$



N_1 = 3.00000	AB = 1.00000	EF = 0.12500	BS = 0.24195	KO = 0.24662
N_2 = 1.00000	AC = 0.75000	PS = 0.40000	BK = 0.43509	KO
N_3 = 2.00000	EJ = 1.25000	HJ = 0.52500	GJ = 0.56009	$R - \frac{KO}{BK}$ = 0.00000
R = 0.56683	AF = 0.37500	HP = 0.61695	GO = 0.62162	

Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

$$AC - \frac{N_1}{N_1 + N_2} = 0 \qquad EJ - \frac{\sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}}}{(N_1 + N_2)} = 0 \qquad AF - \frac{N_1}{2 \cdot (N_1 + N_2)} = 0$$

$$EF - \frac{\sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}} - N_2 - N_1}{2 \cdot (N_1 + N_2)} = 0 \qquad PS - \frac{N_3}{N_1 + N_3} = 0$$

$$HJ - \frac{(N_1 + N_3) \cdot \sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}} - (N_1 - N_3) \cdot (N_1 + N_2)}{2 \cdot (N_1 + N_2) \cdot (N_1 + N_3)} = 0$$

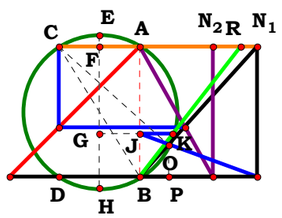
$$HP - \frac{\sqrt{N_1^{\,4} + 6 \cdot N_1^{\,3} \cdot N_3 + 8 \cdot N_1^{\,2} \cdot N_2 \cdot N_3 + N_1^{\,2} \cdot N_3^{\,2} + 4 \cdot N_1 \cdot N_2^{\,2} \cdot N_3}}{\sqrt{4 \cdot \left(N_1^{\,4} + 2 \cdot N_1^{\,3} \cdot N_2 + 2 \cdot N_1^{\,3} \cdot N_3 + N_1^{\,2} \cdot N_2^{\,2} + 4 \cdot N_1^{\,2} \cdot N_2 \cdot N_3 + N_1^{\,2} \cdot N_3^{\,2} + 2 \cdot N_1 \cdot N_2^{\,2} \cdot N_3 + 2 \cdot N_1 \cdot N_2 \cdot N_3^{\,2} + N_2^{\,2} \cdot N_3^{\,2}\right)}} = 0$$

$$BS - (HP - AF) = 0 \qquad BK - \frac{PS \cdot N_1}{N_1 - BS} = 0$$

$$GJ - (BK + EF) = 0 \qquad GO - \sqrt{GJ \cdot (EJ - GJ)} = 0 \qquad KO - (GO - AF) = 0$$

$$R - \frac{KO}{BK} = 0$$

4RST8AB3R6



$N_1 = 0.89818$
$N_2 = 0.55918$
$R = 0.77237$

Unit. $AB := 1$ Given. $N_1 := .89818$ $N_2 := .55918$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

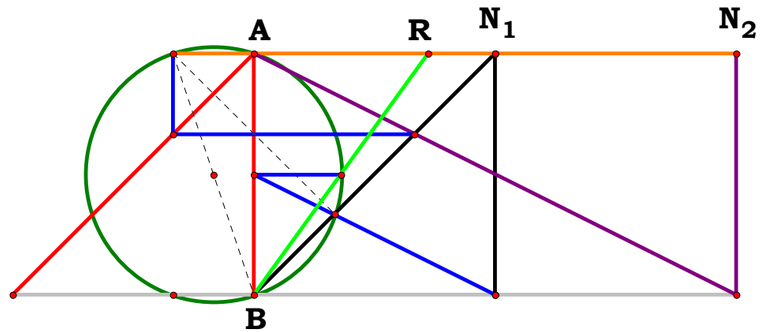
Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BO := BN_1 - ON_1$ $BP := \frac{N_1 \cdot BO}{BN_1}$

$OP := \frac{BP}{N_1}$ $BJ := \frac{OP \cdot N_1}{N_1 - BP}$ $GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$JK := GK - AF$ $R := \frac{JK}{BJ}$ $R = 0.772363$



$N_1 = 1.00000$
$N_2 = 2.00000$
$R = 0.72076$

$$\frac{(N_1^3 \cdot N_2 + N_1^3 + N_1^4) - \sqrt{(((N_1^8 + (2 \cdot N_1^5 \cdot (N_2 - 1) \cdot (N_1^2 - 6 \cdot N_2 - 6)) + (N_1^6 \cdot (N_2^2 - 10 \cdot N_2 - 3))) - (4 \cdot N_1^4 \cdot ((N_2^3 - 4 \cdot N_2^2 - 9 \cdot N_2) + 1))) + (4 \cdot N_1^3 \cdot N_2 \cdot ((4 \cdot N_2^2 + 9 \cdot N_2) - 4)) + (4 \cdot N_1^2 \cdot N_2^2 \cdot ((N_2^2 + 3 \cdot N_2) - 6))) - (4 \cdot N_2^3 \cdot (4 \cdot N_1 + N_2))}}{2 \cdot (N_1 + N_2) \cdot (N_1^2 - N_1 - N_2)} - R = 0.00000$$

Definitions.

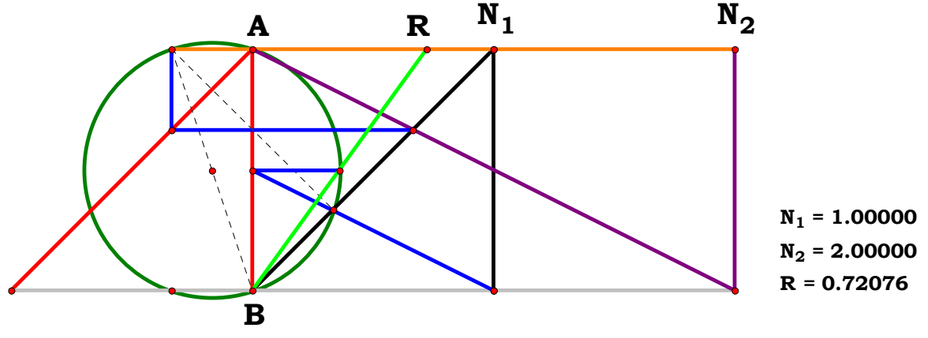
$$R - \frac{N_1^3 \cdot N_2 + N_1^3 + N_1^4 - \sqrt{\begin{matrix} N_1^8 + 2 \cdot N_1^5 \cdot (N_2 - 1) \cdot (N_1^2 - 6 \cdot N_2 - 6) + N_1^6 \cdot (N_2^2 - 10 \cdot N_2 - 3) \ \ldots \\ + \ -4 \cdot N_1^4 \cdot (N_2^3 - 4 \cdot N_2^2 - 9 \cdot N_2 + 1) + 4 \cdot N_1^3 \cdot N_2 \cdot (4 \cdot N_2^2 + 9 \cdot N_2 - 4) \ \ldots \\ + \ 4 \cdot N_1^2 \cdot N_2^2 \cdot (N_2^2 + 3 \cdot N_2 - 6) - 4 \cdot N_2^3 \cdot (4 \cdot N_1 + N_2) \end{matrix}}}{2 \cdot (N_1 + N_2) \cdot (N_1^2 - N_1 - N_2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{\begin{matrix} N_u^4 \cdot B^2 \cdot (A + B)^2 - 2 \cdot N_u^3 \cdot A \cdot B \cdot (A + B) \cdot (2 \cdot A^2 + 4 \cdot A \cdot B + B^2) \ \ldots \\ + \ N_u^2 \cdot A^2 \cdot (2 \cdot A^2 + 2 \cdot A \cdot B - B^2) \cdot (2 \cdot A^2 + 6 \cdot A \cdot B + 3 \cdot B^2) + 12 \cdot N_u \cdot A^3 \cdot B \cdot (A + B)^3 - 4 \cdot A^4 \cdot (A + B)^4 \end{matrix}} - B \cdot N_u \cdot [A \cdot B + N_u \cdot (A + B)]}{2 \cdot A \cdot (A + B) \cdot (A^2 + B \cdot A - B \cdot N_u)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y^3 \cdot q \cdot (Y \cdot q + Z \cdot p + p \cdot q) - \sqrt{\begin{matrix} q^4 \cdot Y^8 + 2 \cdot Y^7 \cdot p \cdot q^3 \cdot (Z - q) + Y^6 \cdot p^2 \cdot q^2 \cdot \left(Z^2 - 10 \cdot Z \cdot q - 3 \cdot q^2\right) \ \ldots \\ + \ -12 \cdot Y^5 \cdot p^3 \cdot q^2 \cdot (Z - q) \cdot (Z + q) + -4 \cdot Y^4 \cdot p^4 \cdot q \cdot \left(Z^3 - 4 \cdot Z^2 \cdot q - 9 \cdot Z \cdot q^2 + q^3\right) \ \ldots \\ + \ 4 \cdot Y^3 \cdot Z \cdot p^5 \cdot q \cdot \left(4 \cdot Z^2 + 9 \cdot Z \cdot q - 4 \cdot q^2\right) + 4 \cdot Y^2 \cdot Z^2 \cdot p^6 \cdot \left(Z^2 + 3 \cdot Z \cdot q - 6 \cdot q^2\right) - 4 \cdot Z^3 \cdot p^7 \cdot (4 \cdot Y \cdot q + Z \cdot p) \end{matrix}}}{2 \cdot p \cdot (Y \cdot q + Z \cdot p) \cdot \left(q \cdot Y^2 - q \cdot Y \cdot p - Z \cdot p^2\right)} = 0$$



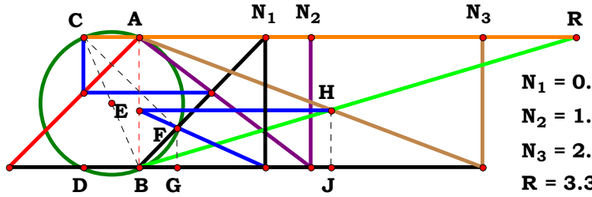
$N_1 = 1.00000$

$N_2 = 2.00000$

$R = 0.72076$

$$\frac{(N_1^3 \cdot N_2 + N_1^3 + N_1^4) - \sqrt{(((N_1^8 + (2 \cdot N_1^5 \cdot (N_2 - 1) \cdot (N_1^2 - 6 \cdot N_2 - 6)) + (N_1^6 \cdot (N_2^2 - 10 \cdot N_2 - 3))) - (4 \cdot N_1^4 \cdot ((N_2^3 - 4 \cdot N_2^2 - 9 \cdot N_2) + 1))) + (4 \cdot N_1^3 \cdot N_2 \cdot ((4 \cdot N_2^2 + 9 \cdot N_2) - 4)) + (4 \cdot N_1^2 \cdot N_2^2 \cdot ((N_2^2 + 3 \cdot N_2) - 6))) - (4 \cdot N_2^3 \cdot (4 \cdot N_1 + N_2))}}{2 \cdot (N_1 + N_2) \cdot (N_1^2 - N_1 - N_2)} - R = 0.00000$$

4RST8AB3R7



$N_1 = 0.96599$
$N_2 = 1.31467$
$N_3 = 2.63667$
$R = 3.35322$

Unit. $AB := 1$ Given. $N_1 := .96599$ $N_2 := 1.31467$ $N_3 := 2.63667$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

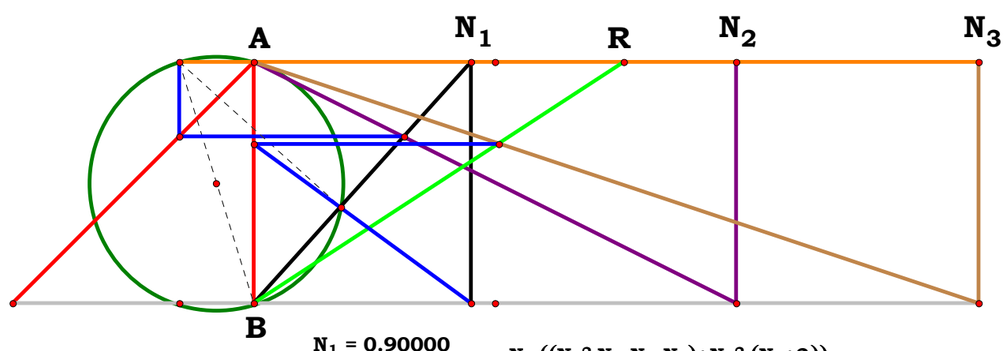
$$AC := \frac{N_1}{N_1 + N_2} \qquad BN_1 := \sqrt{AB^2 + N_1^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1} \qquad BE := \frac{FG \cdot N_1}{N_1 - BG}$$

$$BJ := N_3 \cdot (AB - BE) \qquad R := \frac{BJ}{BE}$$

$R = 3.353318$



$N_1 = 0.90000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$R = 1.53445$

$$\frac{N_3 \cdot ((N_1^2 \cdot N_2 - N_1 - N_2) + N_1^2 \cdot (N_1 + 2))}{(N_1 - N_1^2) + N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot \left[N_1^2 \cdot N_2 - N_1 - N_2 + N_1^2 \cdot (N_1 + 2) \right]}{N_1 - N_1^2 + N_2} = 0$$

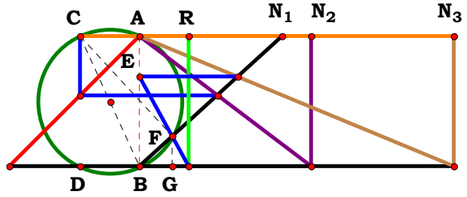
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2 \right) + B \cdot N_u \cdot (2 \cdot A + N_u) \right]}{A \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u \right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot \left(X^3 \cdot p - Y \cdot o^3 + X^2 \cdot Y \cdot o - X \cdot o^2 \cdot p + 2 \cdot X^2 \cdot o \cdot p \right)}{o \cdot q \cdot \left(p \cdot X \cdot o - p \cdot X^2 + Y \cdot o^2 \right)} = 0$$

4RST8AB3R8



$N_1 = 1.09190$
$N_2 = 1.31467$
$N_3 = 2.41390$
$R = 0.37752$

Unit. $AB := 1$ **Given.** $N_1 := 1.09190$ $N_2 := 1.31467$ $N_3 := 2.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

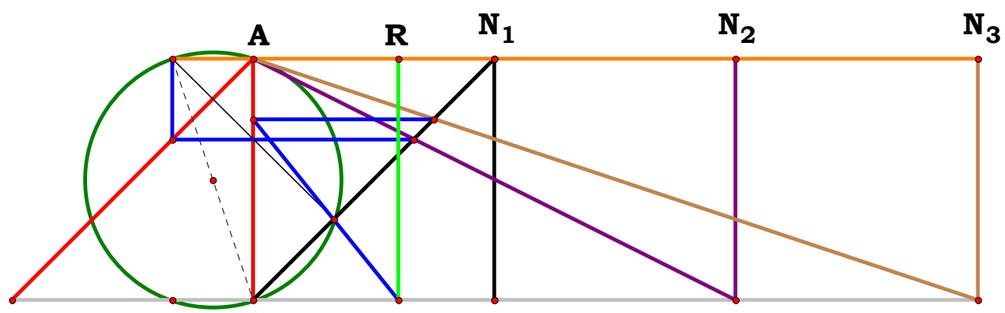
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BE := \frac{N_3}{N_1 + N_3}$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1}$$

$$FG := \frac{BG}{N_1} \qquad R := \frac{BG \cdot BE}{BE - FG} \qquad R = 0.37752$$



Definitions.

$$R - \frac{N_3 \cdot \left(N_1 - N_1^2 + N_2\right)}{N_1 \cdot N_3 \cdot \left(N_1 + N_2 + 1\right) + N_1^2 - N_1 - N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left[A^2 + B \cdot \left(A - N_u\right)\right]}{N_u^2 \cdot (A + B) + N_u \cdot B \cdot (A + C) - A \cdot C \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

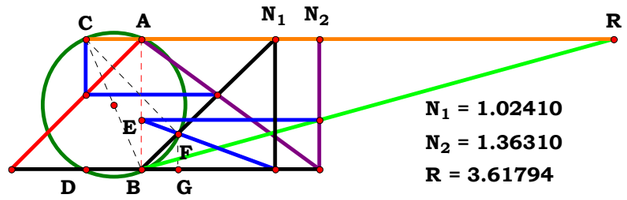
$$R - \frac{Z \cdot \left(p \cdot X \cdot o - p \cdot X^2 + Y \cdot o^2\right)}{Y \cdot o \cdot (X \cdot Z - o \cdot q) + X \cdot p \cdot (X \cdot Z + X \cdot q + Z \cdot o - o \cdot q)} = 0$$

B

$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$R = 0.60000$

$$\frac{N_3 \cdot ((N_1 - N_1^2) + N_2)}{(N_1 \cdot 3 \cdot (N_1 + N_2 + 1) + N_1^2) - N_1 - N_2} - R = 0.00000$$

4RST8AB3R9



$N_1 = 1.02410$
$N_2 = 1.36310$
$R = 3.61794$

Unit. $AB := 1$ Given. $N_1 := 1.02410$ $N_2 := 1.36310$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

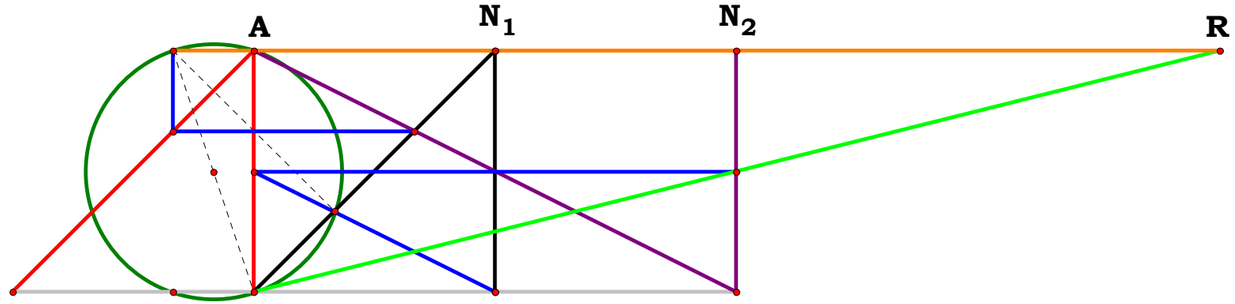
$AC := \frac{N_1}{N_1 + N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $R := \frac{N_2}{BE}$

$R = 3.617938$



Definitions.

$$R - \frac{N_1^2 \cdot N_2 \cdot (N_1 + N_2 + 1)}{N_1 - N_1^2 + N_2} = 0$$

$N_1 = 1.00000$
$N_2 = 2.00000$
$R = 4.00000$

B $\frac{N_1^2 \cdot N_2 \cdot (N_1 + N_2 + 1)}{(N_1 - N_1^2) + N_2} - R = 0.00000$

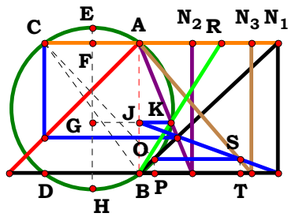
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0$$

$$R - \frac{N_u^2 \cdot [A \cdot B + N_u \cdot (A + B)]}{A \cdot B \cdot (A^2 + B \cdot A - B \cdot N_u)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y^2 \cdot Z \cdot (Y \cdot q + Z \cdot p + p \cdot q)}{p \cdot q \cdot (q \cdot Y \cdot p - q \cdot Y^2 + Z \cdot p^2)} = 0$$

4RST8AB3R10



$N_1 = 1.06284$
$N_2 = 0.40421$
$N_3 = 0.86417$
$R = 0.62545$

Unit. $AB := 1$ **Given.** $N_1 := 1.06284$ $N_2 := .40421$ $N_3 := .86417$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$

$BO := BN_1 - ON_1$ $BP := \frac{N_1 \cdot BO}{BN_1}$

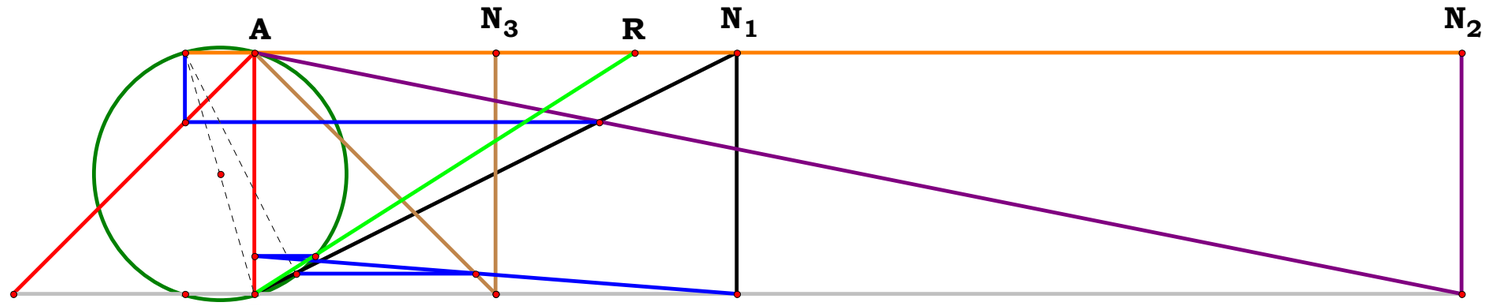
$OP := \frac{BP}{N_1}$ $BT := N_3 \cdot (AB - OP)$

$BJ := \frac{OP \cdot N_1}{N_1 - BT}$ $GH := BJ + EF$

$GK := \sqrt{GH \cdot (EH - GH)}$ $R := \frac{GK - AF}{BJ}$

$R = 0.625446$

Definitions.



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 1.00000$
$R = 1.57555$

$AB = 1.00000$
$AC = 0.28571$
$EH = 1.04002$
$AF = 0.14286$

$EF = 0.02001$
$BN_1 = 2.23607$
$ON_1 = 2.04441$
$BO = 0.19166$

$BP = 0.17143$
$OP = 0.08571$
$BT = 0.91429$
$BJ = 0.15789$

$GH = 0.17790$
$GK = 0.39163$
$R - \frac{GK - AF}{BJ} = 0.00000$

$$AC - \frac{N_1}{N_1 + N_2} = 0 \qquad EH - \frac{\sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}}}{(N_1 + N_2)} = 0 \qquad AF - \frac{N_1}{2 \cdot (N_1 + N_2)} = 0$$

$$EF - \frac{\left(\sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}} - N_2 - N_1\right)}{2 \cdot (N_1 + N_2)} = 0 \qquad BN_1 - \sqrt{N_1^{\,2} + 1} = 0$$

$$ON_1 - \frac{N_1^{\,2} \cdot (N_1 + N_2 + 1)}{(N_1 + N_2) \cdot \sqrt{N_1^{\,2} + 1}} = 0 \qquad BO - \frac{N_1 - N_1^{\,2} + N_2}{(N_1 + N_2) \cdot \sqrt{N_1^{\,2} + 1}} = 0 \qquad BP - \frac{N_1 \cdot (N_1 - N_1^{\,2} + N_2)}{(N_1 + N_2) \cdot (N_1^{\,2} + 1)} = 0$$

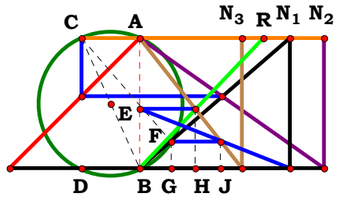
$$OP - \frac{N_1 - N_1^{\,2} + N_2}{(N_1 + N_2) \cdot (N_1^{\,2} + 1)} = 0 \qquad BT - \frac{N_3 \cdot N_1^{\,2} \cdot (N_1 + N_2 + 1)}{(N_1^{\,2} + 1) \cdot (N_1 + N_2)} = 0$$

$$BJ - \frac{N_1 - N_1^{\,2} + N_2}{N_1 + N_2 + N_1^{\,2} \cdot N_2 - N_1^{\,2} \cdot N_3 + N_1^{\,3} - N_1 \cdot N_3 - N_1 \cdot N_2 \cdot N_3} = 0$$

$$GH - \frac{\begin{aligned}&\left(N_1 + N_2 + N_1^{\,2} \cdot N_2 - N_1^{\,2} \cdot N_3 + N_1^{\,3} - N_1 \cdot N_3 - N_1 \cdot N_2 \cdot N_3\right) \cdot \sqrt{2 \cdot N_1^{\,2} + 2 \cdot N_1 \cdot N_2 + N_2^{\,2}} \ \ldots \\ &+ (N_1 + N_2) \cdot \left(N_1 + N_2 - N_1^{\,2} \cdot N_2 + N_1^{\,2} \cdot N_3 - 2 \cdot N_1^{\,2} - N_1^{\,3} + N_1 \cdot N_3 + N_1 \cdot N_2 \cdot N_3\right)\end{aligned}}{2 \cdot (N_1 + N_2) \cdot \left(N_1 + N_2 + N_1^{\,2} \cdot N_2 - N_1^{\,2} \cdot N_3 + N_1^{\,3} - N_1 \cdot N_3 - N_1 \cdot N_2 \cdot N_3\right)} = 0$$

$$GK - \sqrt{GH \cdot (EH - GH)} = 0 \qquad R - \frac{GK - AF}{BJ} = 0$$

4RST8AB3R11



$N_1 = 1.15002$
$N_2 = 1.41153$
$N_3 = 0.78668$
$R = 0.94487$

Unit. $AB := 1$ **Given.** $N_1 := 1.15002$ $N_2 := 1.41153$ $N_3 := .78668$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

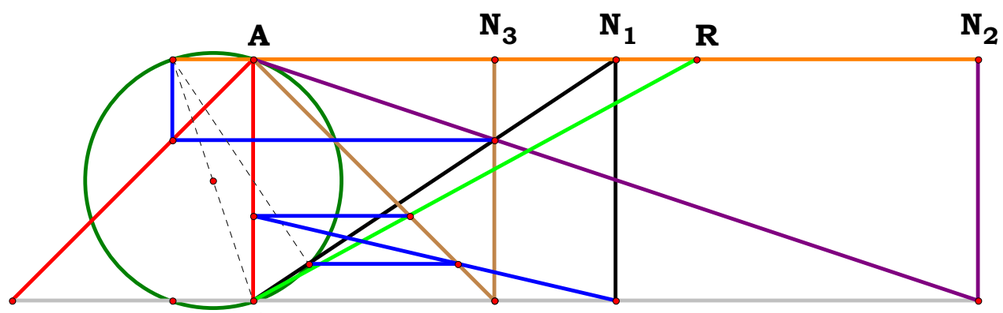
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BJ := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BJ}$$

$$BH := N_3 \cdot (AB - BE) \qquad R := \frac{BH}{BE} \qquad R = 0.944894$$



Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot (N_1 - N_3) \cdot (N_1 + N_2 + 1)}{N_1 - N_1^2 + N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u^2 \cdot (C - A) \cdot [A \cdot B + N_u \cdot (A + B)]}{A \cdot C^2 \cdot (A^2 + B \cdot A - B \cdot N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

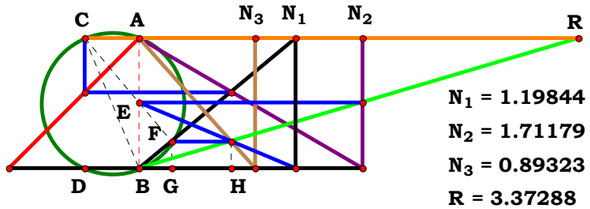
$$R - \frac{X \cdot Z \cdot (X \cdot q - Z \cdot o) \cdot (X \cdot p + Y \cdot o + o \cdot p)}{o \cdot q^2 \cdot (p \cdot X \cdot o - p \cdot X^2 + Y \cdot o^2)} = 0$$

B

$N_1 = 1.50000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R = 1.83333$

$$\frac{N_1 \cdot N_3 \cdot (N_1 - N_3) \cdot (N_1 + N_2 + 1)}{(N_1 - N_1^2) + N_2} - R = 0.00000$$

4RST8AB3R12



$N_1 = 1.19844$
$N_2 = 1.71179$
$N_3 = 0.89323$
$R = 3.37288$

Unit. $AB := 1$ **Given.** $N_1 := 1.19844$ $N_2 := 1.71179$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

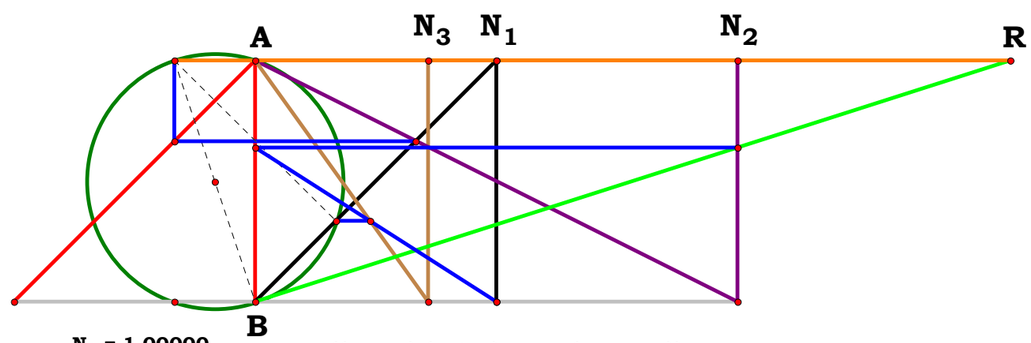
Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BN_1 := \sqrt{AB^2 + N_1{}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1} \qquad BH := N_3 \cdot (AB - FG)$$

$$BE := \frac{FG \cdot N_1}{N_1 - BH} \qquad R := \frac{N_2}{BE} \qquad R = 3.372825$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 0.71764$
$R = 3.12945$

$$\frac{N_2 \cdot ((N_1+N_2) \cdot (N_1{}^2+1) - N_1 \cdot N_3 \cdot (N_1+N_2+1))}{(N_1 - N_1{}^2) + N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot \left[\left(N_1{}^2 + 1 \right) \cdot \left(N_1 + N_2 \right) - N_1 \cdot N_3 \cdot \left(N_1 + N_2 + 1 \right) \right]}{N_1 - N_1{}^2 + N_2} = 0$$

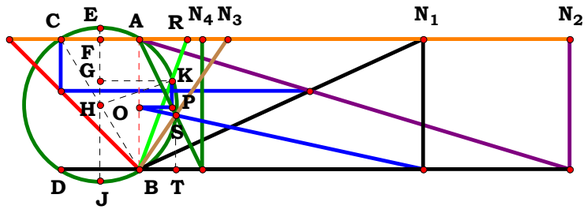
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot A^2 \cdot C \cdot (A + B) - N_u{}^3 \cdot (A - C) \cdot (A + B) - A^2 \cdot B \cdot N_u{}^2}{A \cdot B \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u \right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q \cdot \left(X^2 + o^2 \right) \cdot (X \cdot p + Y \cdot o) - Z \cdot X \cdot Y \cdot o \cdot (X \cdot p + Y \cdot o + o \cdot p)}{q \cdot X \cdot o^2 \cdot p^2 - q \cdot X^2 \cdot o \cdot p^2 + Y \cdot q \cdot o^3 \cdot p} = 0$$

4RST8AB4R0



$N_1 = 2.17671$
$N_2 = 3.30026$
$N_3 = 0.68014$
$N_4 = 0.48406$
$R = 0.36955$

Unit. $AB := 1$ Given. $N_1 := 2.17671$ $N_2 := 3.30026$ $N_3 := .68014$

$N_4 := .48406$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$

$m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$EF := \frac{EJ - AB}{2}$ $AF := \frac{AC}{2}$

$HK := \frac{EJ}{2}$ $ST := \frac{N_4}{N_4 + N_3}$

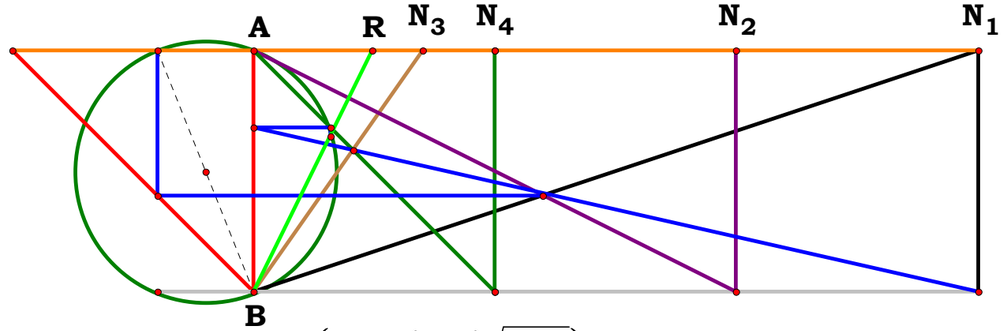
$BT := N_3 \cdot ST$ $TU := N_1 - BT$

$BO := \frac{ST \cdot N_1}{TU}$ $OP := N_4 - N_4 \cdot BO$

$GK := AF + OP$ $GH := \sqrt{HK^2 - GK^2}$

$EG := HK - GH$ $GJ := EJ - EG$

$R := \frac{OP}{GJ - EF}$ $R = 0.369547$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 1.00000$
$R = 0.49209$

$$\frac{\left(2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot \sqrt{N_1 + N_2}\right)}{\sqrt{\left(N_3^2 \cdot (N_1 - N_4)^2 \cdot ((N_1 + N_2) - 4 \cdot N_4 \cdot (N_2 + N_1 \cdot N_4 + N_2 \cdot N_4))\right) + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot ((N_1 + N_2) - 2 \cdot N_2 \cdot N_4)) + \left(N_1^2 \cdot N_4^2 \cdot (N_1 + N_2)\right)} + \left(\sqrt{N_1 + N_2} \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)\right)} - R = 0.00000$$

Definitions.

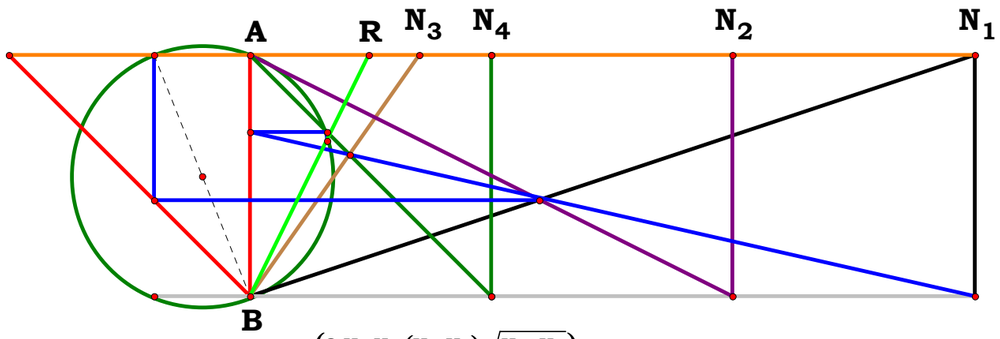
$$R - \frac{2 \cdot N_3 \cdot N_4 \cdot \sqrt{N_1 + N_2} \cdot (N_1 - N_4)}{\sqrt{N_3^2 \cdot (N_1 - N_4)^2 \cdot [N_1 + N_2 - 4 \cdot N_4 \cdot (N_2 + N_1 \cdot N_4 + N_2 \cdot N_4)] \ \ldots \\ + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot (N_1 + N_2 - 2 \cdot N_2 \cdot N_4) + N_1^2 \cdot N_4^2 \cdot (N_1 + N_2)}} + \sqrt{N_1 + N_2} \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4) = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A + B)} \cdot (A - D)}{\sqrt{A \cdot N_u + B \cdot N_u} \cdot D \cdot (A - C - D) - \sqrt{N_u \cdot \left[D^2 \cdot (A + B) \cdot (C - A + D)^2 - 4 \cdot N_u^2 \cdot (A + B) \cdot (A - D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A - D) \cdot (C - A + D)\right]}} = 0$$

$$N_1 - \frac{W}{m} = 0 \quad N_2 - \frac{X}{n} = 0 \quad N_3 - \frac{Y}{o} = 0 \quad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{2 \cdot Y \cdot Z \cdot \sqrt{W \cdot n + X \cdot m} \cdot (W \cdot p - Z \cdot m) \cdot \sqrt{m} \cdot \sqrt{n}}{\sqrt{\begin{aligned} &2 \cdot Y \cdot W \cdot Z \cdot o \cdot p \cdot (W \cdot p - Z \cdot m) \cdot (W \cdot n \cdot p - 2 \cdot X \cdot Z \cdot m + X \cdot m \cdot p) \ \ldots \\ &+ \ -Y^2 \cdot (W \cdot p - Z \cdot m)^2 \cdot \left(4 \cdot W \cdot Z^2 \cdot n + 4 \cdot X \cdot Z^2 \cdot m - W \cdot n \cdot p^2 - X \cdot m \cdot p^2 + 4 \cdot X \cdot Z \cdot m \cdot p\right) \ \ldots \\ &+ \ n \cdot W^3 \cdot Z^2 \cdot o^2 \cdot p^2 + X \cdot m \cdot W^2 \cdot Z^2 \cdot o^2 \cdot p^2 \end{aligned}} \cdot \sqrt{m \cdot n} + \sqrt{W \cdot n + X \cdot m} \cdot \sqrt{n} \cdot \sqrt{m} \cdot p \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$



$N_1 = 3.00000$

$N_2 = 2.00000$

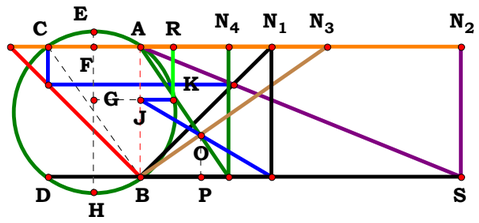
$N_3 = 0.70000$

$N_4 = 1.00000$

$R = 0.49209$

$$\frac{\left(2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot \sqrt{N_1 + N_2}\right)}{\sqrt{\left(N_3^2 \cdot (N_1 - N_4)^2 \cdot ((N_1 + N_2) - 4 \cdot N_4 \cdot (N_2 + N_1 \cdot N_4 + N_2 \cdot N_4)\right)) + \left(2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot ((N_1 + N_2) - 2 \cdot N_2 \cdot N_4)\right) + \left(N_1^2 \cdot N_4^2 \cdot (N_1 + N_2)\right)} + \left(\sqrt{N_1 + N_2} \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)\right)} - R = 0.00000$$

4RST8AB4R1



$N_1 = 1.00473$
$N_2 = 2.45760$
$N_3 = 1.43563$
$N_4 = 0.67778$
$R = 0.25131$

Unit. $AB := 1$ Given. $N_1 := 1.00473$ $N_2 := 2.45760$ $N_3 := 1.43563$ $N_4 := .67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

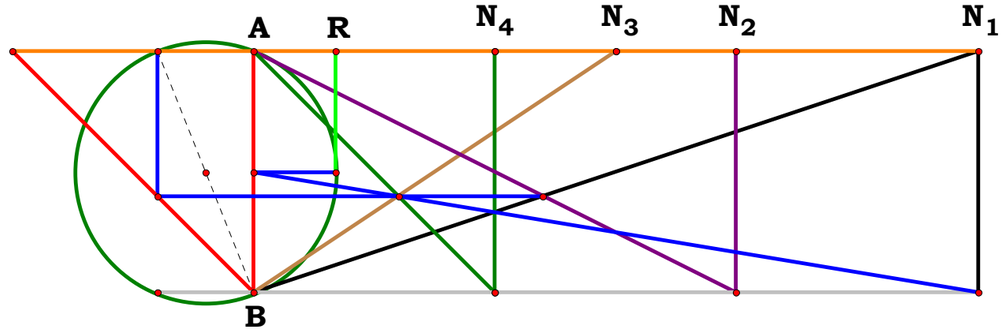
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.251311$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.50000$
$N_4 = 1.00000$
$R = 0.33852$

$$\frac{\sqrt{(N_2 \cdot N_3 \cdot (N_1 - N_4))^2 + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2) \cdot (N_1 - N_4)) + (N_1 \cdot N_2 \cdot N_4)^2} - (N_2 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))}{(2 \cdot (N_1 + N_2) \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_2^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^2 \cdot N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

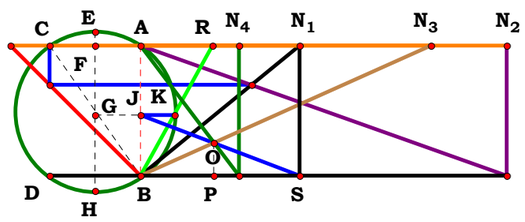
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{A \cdot (C - A + D) - \sqrt{A^2 \cdot C^2 - 2 \cdot C \cdot (3 \cdot A^2 + 4 \cdot A \cdot B + 2 \cdot B^2) \cdot (A - D) + A^2 \cdot (A - D)^2}}{2 \cdot (A - C - D) \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot X^2 \cdot m^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot (2 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 3 \cdot X^2 \cdot m^2) \cdot (W \cdot p - Z \cdot m) + W^2 \cdot X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot m \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{(2 \cdot W \cdot n + 2 \cdot X \cdot m) \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB4R2



$N_1 = 1.21782$
$N_2 = 2.80628$
$N_3 = 2.22987$
$N_4 = 0.75526$
$R = 0.55203$

Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := 2.80628$ $N_3 := 2.22987$ $N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

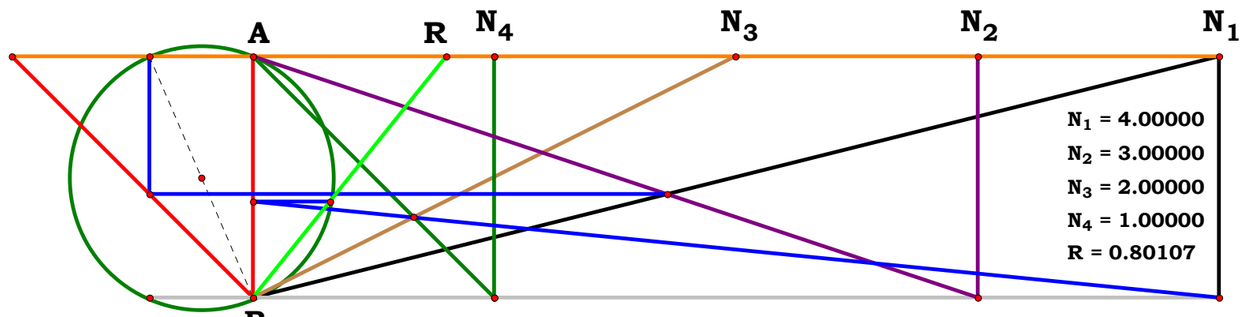
$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $EG := EH - GH$



$$\frac{\sqrt{(N_2 \cdot N_3 \cdot (N_1 - N_4))^2 + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2) \cdot (N_1 - N_4)) + (N_1 \cdot N_2 \cdot N_4)^2} - N_2 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)}{(2 \cdot N_1 \cdot N_4 \cdot (N_1 + N_2))} - R = 0.00000$$

$GK := \sqrt{EG \cdot GH}$ $R := \frac{GK - AF}{BJ}$ $R = 0.552031$

Definitions.

$$R - \frac{\sqrt{N_2^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot \left(2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2\right) \cdot (N_1 - N_4) + N_1^2 \cdot N_2^2 \cdot N_4^2} - N_2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot (N_1 + N_2) \cdot N_1 \cdot N_4} = 0$$

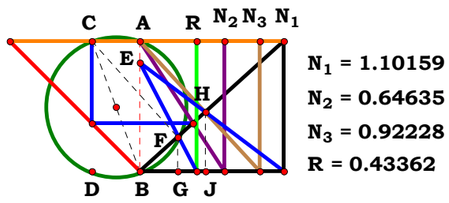
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{\sqrt{A^2 \cdot C^2 + A^2 \cdot (A - D)^2 - 2 \cdot C \cdot (A - D) \cdot \left(3 \cdot A^2 + 4 \cdot A \cdot B + 2 \cdot B^2\right)} + A \cdot (A - C - D)}{2 \cdot C \cdot (A + B)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot X^2 \cdot m^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot \left(2 \cdot W^2 \cdot n^2 + 4 \cdot W \cdot X \cdot m \cdot n + 3 \cdot X^2 \cdot m^2\right) \cdot (W \cdot p - Z \cdot m) + W^2 \cdot X^2 \cdot Z^2 \cdot m^2 \cdot o^2} - X \cdot m \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot W \cdot Z \cdot o \cdot (W \cdot n + X \cdot m)} = 0$$

4RST8AB4R4



Unit. $AB := 1$ Given. $N_1 := 1.10159$ $N_2 := .64635$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

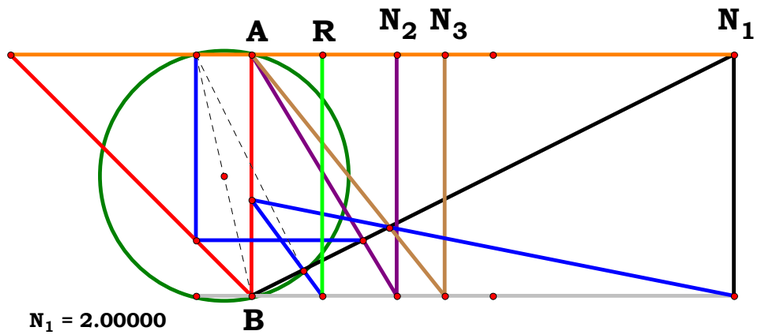
$$AC := \frac{N_2}{N_1 + N_2} \qquad HJ := \frac{N_3}{N_1 + N_3}$$

$$BJ := N_1 \cdot HJ \qquad BN_1 := \sqrt{AB^2 + N_1{}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1} \qquad BE := \frac{HJ \cdot N_1}{N_1 - BJ}$$

$$R := \frac{BE \cdot BG}{BE - FG} \qquad R = 0.433618$$



$N_1 = 2.00000$
$N_2 = 0.60000$
$N_3 = 0.80000$

$$\frac{N_1 \cdot N_3 \cdot ((N_1 + N_2) - (N_1 \cdot N_2))}{N_3 \cdot (N_1 + N_2) \cdot (N_1{}^2 + 1) - N_1 \cdot ((N_1 + N_2) - (N_1 \cdot N_2))} - R = 0.00000$$

$R = 0.29474$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot (N_1 + N_2 - N_1 \cdot N_2)}{N_3 \cdot (N_1{}^2 + 1) \cdot (N_1 + N_2) - N_1 \cdot (N_1 + N_2 - N_1 \cdot N_2)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot N_u \cdot (A + B - N_u)}{(A^2 + N_u{}^2) \cdot (A + B) - C \cdot A \cdot (A + B - N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X \cdot Z \cdot o \cdot (X \cdot p - X \cdot Y + Y \cdot o)}{Y \cdot o \cdot (X^2 \cdot Z + Z \cdot o^2 + X^2 \cdot q - X \cdot o \cdot q) + X \cdot p \cdot (Z \cdot X^2 - q \cdot X \cdot o + Z \cdot o^2)} = 0$$

4RST8AB4R5

Unit.

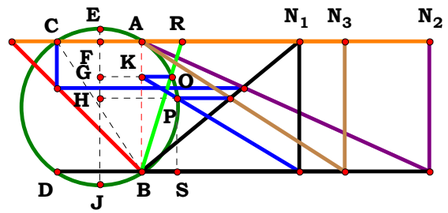
$AB := 1$

Given.

$N_1 := 1.20813$

$N_2 := 2.20577$

$N_3 := 1.56155$



$N_1 = 1.20813$

$N_2 = 2.20577$

$N_3 = 1.56155$

$R = 0.31444$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

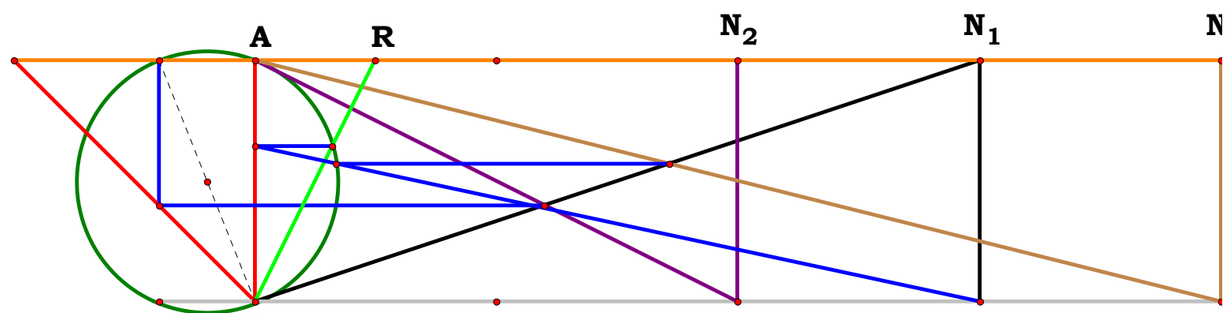
$PS := \frac{N_3}{N_1 + N_3}$ $HJ := PS + EF$

$HP := \sqrt{HJ \cdot (EJ - HJ)}$ $BS := HP - AF$

$BK := \frac{PS \cdot N_1}{N_1 - BS}$ $GJ := BK + EF$

$GO := \sqrt{GJ \cdot (EJ - GJ)}$ $KO := GO - AF$

$R := \frac{KO}{BK}$ $R = 0.314439$



$N_1 = 3.00000$ $AB = 1.00000$ $EF = 0.03852$ $BS = 0.33376$ $KO = 0.31919$

$N_2 = 2.00000$ $AC = 0.40000$ $PS = 0.57143$ $BK = 0.64296$ $R - \frac{KO}{BK} = 0.00000$

$N_3 = 4.00000$ $EJ = 1.07703$ $HJ = 0.60995$ $GJ = 0.68148$

$R = 0.49645$ $AF = 0.20000$ $HP = 0.53376$ $GO = 0.51919$

Definitions.

$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3}$ $B := \sqrt{(N_1 + N_3)^2}$ $C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$

$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$

$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$

$$AC - \frac{N_2}{N_1 + N_2} = 0 \qquad EJ - \frac{\sqrt{N_1^2 + 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2}}{(N_1 + N_2)} = 0 \qquad AF - \frac{N_2}{2 \cdot (N_1 + N_2)} = 0$$

$$EF - \frac{\sqrt{N_1^2 + 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2} - N_2 - N_1}{2 \cdot (N_1 + N_2)} = 0 \qquad PS - \frac{N_3}{N_1 + N_3} = 0$$

$$HJ - \frac{\sqrt{N_1^2 + 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2} \cdot (N_1 + N_3) - (N_1 - N_3) \cdot (N_1 + N_2)}{2 \cdot (N_1 + N_2) \cdot (N_1 + N_3)} = 0$$

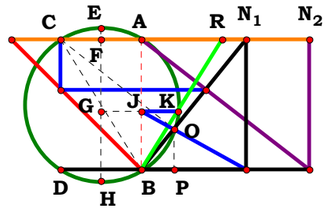
$$HP - \sqrt{HJ \cdot (EJ - HJ)} = 0 \qquad BS - (HP - AF) = 0$$

$$BK - \frac{PS \cdot N_1}{N_1 - BS} = 0 \qquad GJ - (BK + EF) = 0$$

$$GO - \sqrt{GJ \cdot (EJ - GJ)} = 0 \qquad KO - (GO - AF) = 0$$

$$R - \frac{KO}{BK} = 0$$

4RST8AB4R6



$N_1 = 0.80133$
$N_2 = 1.28562$
$R = 0.62073$

Unit. $AB := 1$ **Given.** $N_1 := .80133$ $N_2 := 1.28562$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

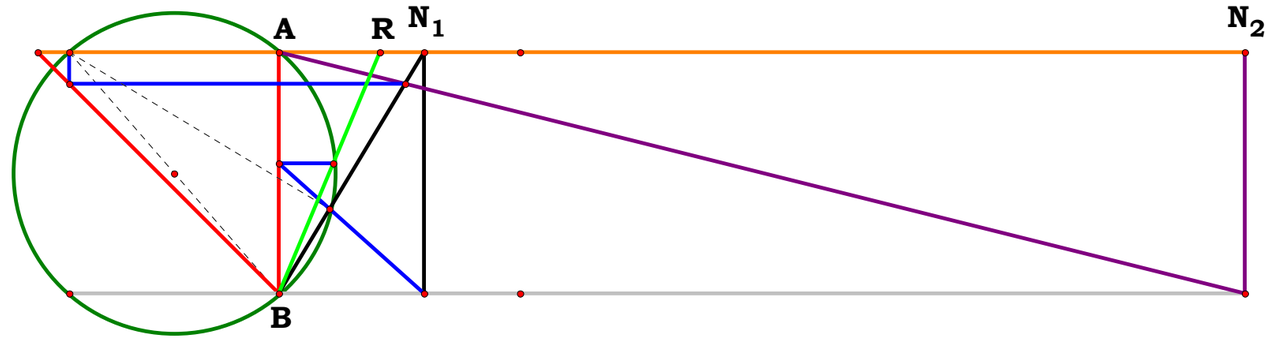
$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BO := BN_1 - ON_1$

$BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$ $BJ := \frac{OP \cdot N_1}{N_1 - BP}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$JK := GK - AF$ $R := \frac{JK}{BJ}$ $R = 0.620735$



$N_1 = 0.60000$
$N_2 = 4.00000$
$R = 0.41750$

Definitions.

$$\frac{(N_1 \cdot N_2 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)) - \sqrt{(((N_1^6 \cdot (N_2 - 2)^2) + (2 \cdot N_1^3 \cdot N_2 \cdot (N_2 - 4) \cdot ((N_1^2 \cdot N_2 - 2 \cdot N_1^2 - N_2^2 - 4 \cdot N_2) + 2)) + (N_1^4 \cdot ((N_2^2 - 8 \cdot N_2) + 2) \cdot (N_2^2 - 2 \cdot N_2 - 2))) - (3 \cdot N_1^2 \cdot N_2^2 \cdot ((N_2^2 - 12 \cdot N_2) + 8))) + (4 \cdot N_1 \cdot N_2^3 \cdot (3 \cdot N_2 - 4) - 4 \cdot N_2^4)}{(2 \cdot (N_1 + N_2) \cdot (N_1 \cdot N_2 - (N_1 + N_2)))} - R = 0.00000$$

$$R - \frac{N_1 \cdot N_2 \cdot \left(N_1^2 + N_1 \cdot N_2 + N_2\right) - \sqrt{\begin{aligned} &N_1^6 \cdot \left(N_2 - 2\right)^2 + 2 \cdot N_1^3 \cdot N_2 \cdot \left(N_2 - 4\right) \cdot \left(N_1^2 \cdot N_2 - 2 \cdot N_1^2 - N_2^2 - 4 \cdot N_2 + 2\right) \ \ldots \\ &+ N_1^4 \cdot \left(N_2^2 - 8 \cdot N_2 + 2\right) \cdot \left(N_2^2 - 2 \cdot N_2 - 2\right) - 3 \cdot N_1^2 \cdot N_2^2 \cdot \left(N_2^2 - 12 \cdot N_2 + 8\right) \ \ldots \\ &+ 4 \cdot N_1 \cdot N_2^3 \cdot \left(3 \cdot N_2 - 4\right) - 4 \cdot N_2^4 \end{aligned}}}{2 \cdot \left(N_1 + N_2\right) \cdot \left(N_1 \cdot N_2 - N_2 - N_1\right)} = 0$$

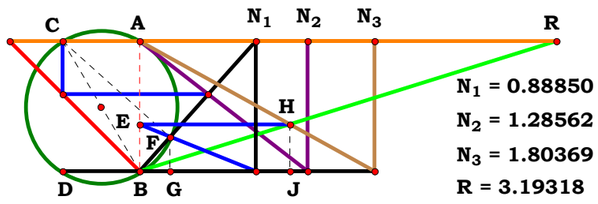
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{N_u^4 \cdot (A + B)^2 - 2 \cdot N_u^3 \cdot (A + B) \cdot \left(A^2 + 4 \cdot A \cdot B + 2 \cdot B^2\right) + \left[\left(3 \cdot A^2 + 6 \cdot A \cdot B + 2 \cdot B^2\right) \cdot \left(2 \cdot A \cdot B - A^2 + 2 \cdot B^2\right)\right] \cdot N_u^2 + 12 \cdot N_u \cdot A^2 \cdot (A + B)^3 - 4 \cdot A^2 \cdot (A + B)^4} - N_u \cdot \left(A^2 + N_u \cdot A + B \cdot N_u\right)}{2 \cdot A \cdot (A + B) \cdot \left(A + B - N_u\right)} = 0$$

$$N_1 - \frac{Y}{p} = 0 \qquad N_2 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot Z \cdot \left(q \cdot Y^2 + Z \cdot Y \cdot p + Z \cdot p^2\right) - \sqrt{\begin{array}{l} Y^6 \cdot q^2 \cdot (Z - 2 \cdot q)^2 + 2 \cdot Y^5 \cdot Z \cdot p \cdot q \cdot (Z - 4 \cdot q) \cdot (Z - 2 \cdot q) + Y^4 \cdot p^2 \cdot \left(Z^2 - 2 \cdot Z \cdot q - 2 \cdot q^2\right) \cdot \left(Z^2 - 8 \cdot Z \cdot q + 2 \cdot q^2\right) \ \ldots \\ + \ -2 \cdot Y^3 \cdot Z \cdot p^3 \cdot (Z - 4 \cdot q) \cdot \left(Z^2 + 4 \cdot Z \cdot q - 2 \cdot q^2\right) - 3 \cdot Y^2 \cdot Z^2 \cdot p^4 \cdot \left(Z^2 - 12 \cdot Z \cdot q + 8 \cdot q^2\right) + 4 \cdot Z^3 \cdot p^5 \cdot (3 \cdot Y \cdot Z - 4 \cdot Y \cdot q - Z \cdot p) \end{array}}}{2 \cdot p \cdot (Y \cdot q + Z \cdot p) \cdot (Y \cdot Z - Y \cdot q - Z \cdot p)} = 0$$

4RST8AB4R7



$N_1 = 0.88850$

$N_2 = 1.28562$

$N_3 = 1.80369$

$R = 3.19318$

Unit. $AB := 1$ **Given.** $N_1 := .88850$ $N_2 := 1.28562$ $N_3 := 1.80369$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

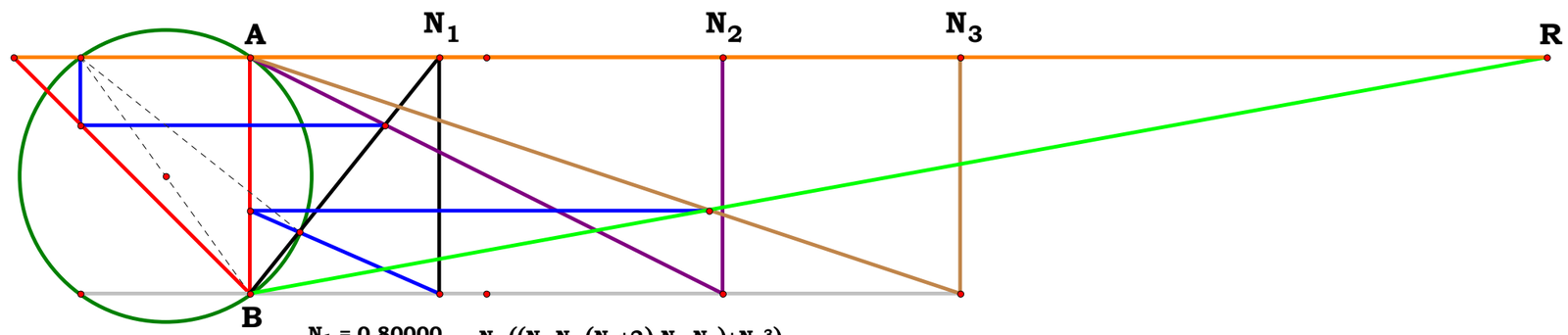
$$AC := \frac{N_2}{N_1 + N_2} \qquad BN_1 := \sqrt{AB^2 + N_1^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BE := \frac{FG \cdot N_1}{N_1 - BG} \qquad BJ := N_3 \cdot (AB - BE)$$

$$R := \frac{BJ}{BE} \qquad R = 3.193193$$



$N_1 = 0.80000$

$N_2 = 2.00000$

$N_3 = 3.00000$

$R = 5.48000$

$$\frac{N_3 \cdot ((N_1 \cdot N_2 \cdot (N_1 + 2) - N_2 - N_1) + N_1^3)}{(N_1 + N_2) - N_1 \cdot N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot \left[N_1 \cdot N_2 \cdot (N_1 + 2) - N_2 - N_1 + N_1^3\right]}{N_1 + N_2 - N_1 \cdot N_2} = 0$$

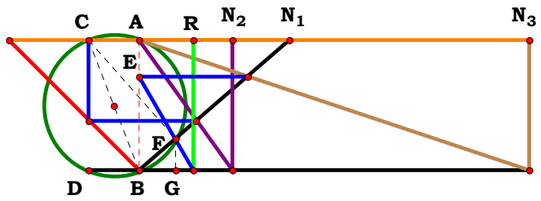
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)}{A^2 \cdot C \cdot (A + B - N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{X^2 \cdot Z \cdot (X \cdot p + Y \cdot o) + X \cdot Z \cdot o^2 \cdot (2 \cdot Y - p) - Y \cdot Z \cdot o^3}{o^2 \cdot q \cdot (X \cdot p - X \cdot Y + Y \cdot o)} = 0$$

4RST8AB4R8



$N_1 = 1.15002$
$N_2 = 0.71415$
$N_3 = 2.99504$
R = 0.41553

Unit. $AB := 1$ Given. $N_1 := 1.15002$ $N_2 := .71415$ $N_3 := 2.99504$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

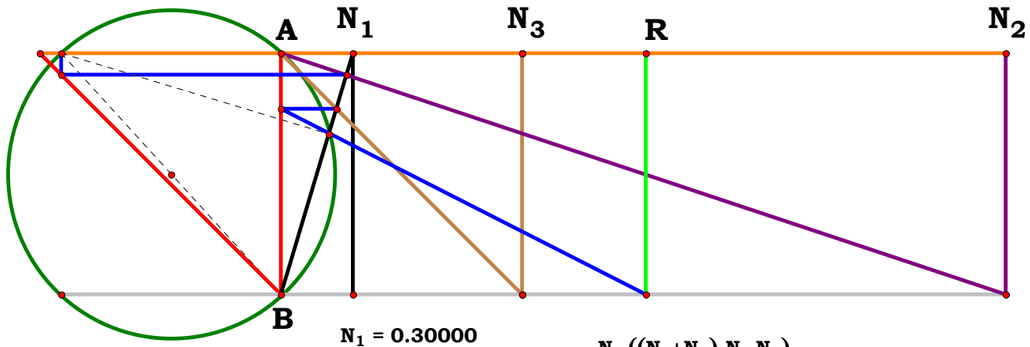
Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BE := \frac{N_3}{N_1 + N_3}$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1}$$

$$FG := \frac{BG}{N_1} \qquad R := \frac{BG \cdot BE}{BE - FG} \qquad R = 0.415528$$



$N_1 = 0.30000$
$N_2 = 3.00000$
$N_3 = 1.00000$
R = 1.50943

$$\frac{N_3 \cdot ((N_1 + N_2) - N_1 \cdot N_2)}{(N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2) + N_1 \cdot N_2) - N_1 - N_2} - R = 0.00000$$

Definitions.

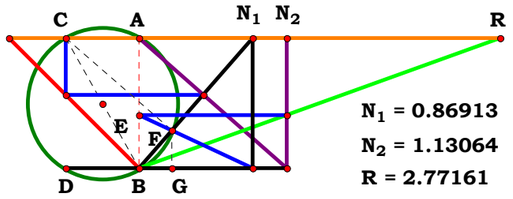
$$R - \frac{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_2)}{N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2) + N_1 \cdot N_2 - N_2 - N_1} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot N_u \cdot (A + B - N_u)}{N_u^2 \cdot (A + B) + N_u \cdot A \cdot (A + C) - A \cdot C \cdot (A + B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot o \cdot (X \cdot p - X \cdot Y + Y \cdot o)}{Y \cdot o \cdot (X \cdot Z + X \cdot q + Z \cdot o - o \cdot q) + X \cdot p \cdot (X \cdot Z - o \cdot q)} = 0$$



$N_1 = 0.86913$
$N_2 = 1.13064$
$R = 2.77161$

Unit. $AB := 1$ **Given.** $N_1 := .86913$ $N_2 := 1.13064$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

4RST8AB4R9

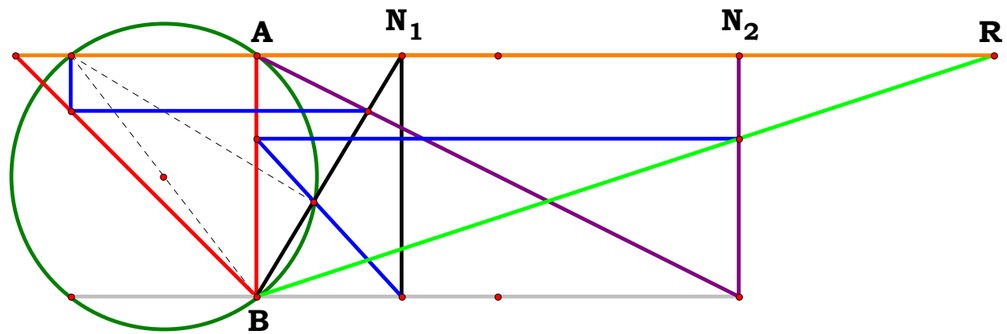
Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $R := \frac{N_2}{BE}$ $R = 2.771609$



$N_1 = 0.60000$
$N_2 = 2.00000$
$R = 3.05143$

$\frac{N_1 \cdot N_2 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)}{(N_1 + N_2) - N_1 \cdot N_2} - R = 0.00000$

Definitions.

$R - \frac{N_1 \cdot N_2 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)}{N_1 + N_2 - N_1 \cdot N_2} = 0$

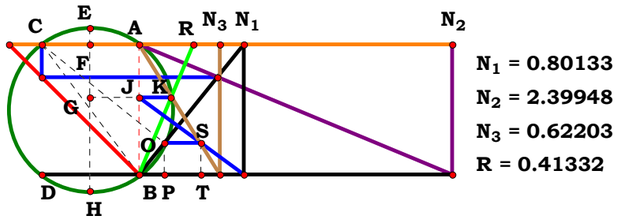
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u^2 \cdot [A^2 + N_u \cdot (A + B)]}{A^2 \cdot B \cdot (A + B - N_u)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot Z \cdot (q \cdot Y^2 + Z \cdot Y \cdot p + Z \cdot p^2)}{p^2 \cdot q \cdot (Y \cdot q - Y \cdot Z + Z \cdot p)} = 0$

4RST8AB4R10



$N_1 = 0.80133$
$N_2 = 2.39948$
$N_3 = 0.62203$
$R = 0.41332$

Unit. $AB := 1$ **Given.** $N_1 := .80133$ $N_2 := 2.39948$ $N_3 := .62203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EH := \sqrt{AB^2 + AC^2}$

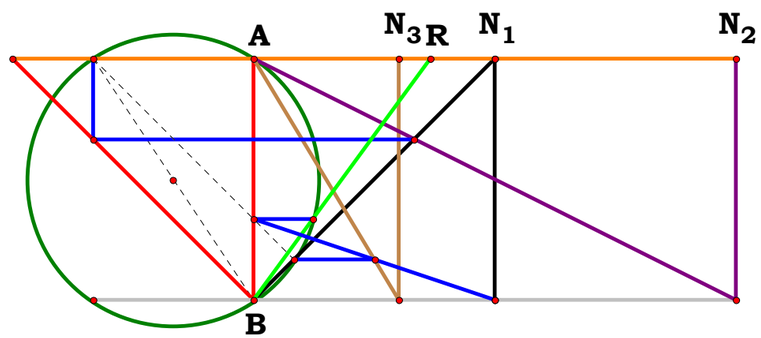
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$

$BO := BN_1 - ON_1$ $BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$

$BT := N_3 \cdot (AB - OP)$ $BJ := \frac{OP \cdot N_1}{N_1 - BT}$ $GH := BJ + EF$

$GK := \sqrt{GH \cdot (EH - GH)}$ $R := \frac{GK - AF}{BJ}$ $R = 0.413318$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$R = 0.73205$

$$\frac{\sqrt{((N_2^2 \cdot N_3^2 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)^2) + ((N_1 \cdot N_2 \cdot (N_1 - 2) - N_2 - 2 \cdot N_1^2)^2 \cdot (N_1 + N_2)^2)) - (2 \cdot N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2) \cdot (N_1 + N_2) \cdot (N_1 \cdot N_2 \cdot (N_1 - 2) \cdot (N_2 - 2) + 2 \cdot N_1^2 + 3 \cdot N_2^2))} - (N_2 \cdot ((((N_1 + N_2 + N_1^2 \cdot N_2) - N_1^2 \cdot N_3) + N_1^3) - N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3))}{2 \cdot (N_1 + N_2) \cdot ((N_1 + N_2) - N_1 \cdot N_2)} - R = 0.00000$$

Definitions.

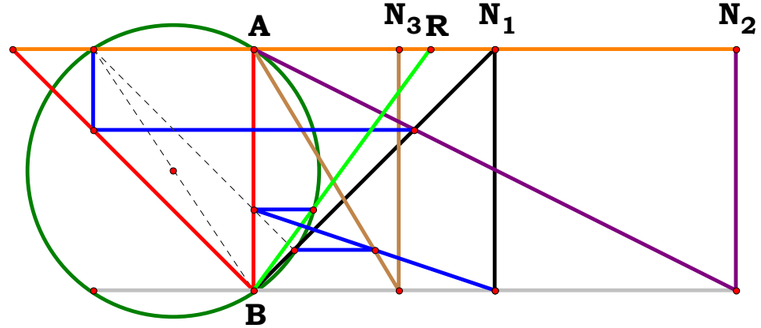
$$R - \frac{\sqrt{\begin{matrix} N_2^2 \cdot N_3^2 \cdot \left(N_1^2 + N_1 \cdot N_2 + N_2\right)^2 + \left[N_1 \cdot N_2 \cdot \left(N_1 - 2\right) - N_2 - 2 \cdot N_1^2\right]^2 \cdot \left(N_1 + N_2\right)^2 \ \ldots \\ + \ -2 \cdot N_3 \cdot \left(N_1^2 + N_1 \cdot N_2 + N_2\right) \cdot \left(N_1 + N_2\right) \cdot \left[N_1 \cdot N_2 \cdot \left(N_2 - 2\right) \cdot \left(N_1 - 2\right) + 2 \cdot N_1^2 + 3 \cdot N_2^2\right] \end{matrix}} - N_2 \cdot \left(N_1 + N_2 + N_1^2 \cdot N_2 - N_1^2 \cdot N_3 + N_1^3 - N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3\right)}{2 \cdot \left(N_1 + N_2\right) \cdot \left(N_1 + N_2 - N_1 \cdot N_2\right)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{\begin{matrix} C^2 \cdot (A + B)^2 \cdot \left[A^2 + N_u \cdot \left(2 \cdot A + 2 \cdot B - N_u\right)\right]^2 + A^2 \cdot N_u^2 \cdot \left(A^2 + N_u \cdot A + B \cdot N_u\right)^2 \ \ldots \\ + \ -2 \cdot C \cdot A \cdot N_u \cdot (A + B) \cdot \left[A^2 + N_u \cdot (A + B)\right] \cdot \left(3 \cdot A^2 + 4 \cdot A \cdot B - 2 \cdot A \cdot N_u + 2 \cdot B^2 - 2 \cdot B \cdot N_u + N_u^2\right) \end{matrix}} + \left[N_u^2 \cdot (A - C) \cdot (A + B) + A^3 \cdot N_u - \left[A^2 \cdot C \cdot (A + B)\right]\right]}{2 \cdot A \cdot C \cdot (A + B) \cdot \left(A + B - N_u\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y \cdot q \cdot \left(X^2 + o^2\right) \cdot (X \cdot p + Y \cdot o) \ \ldots + -Y \cdot Z \cdot o \cdot \left(p \cdot X^2 + Y \cdot X \cdot o + Y \cdot o^2\right) - \sqrt{\begin{matrix} Z^2 \cdot Y^2 \cdot o^2 \cdot \left(p \cdot X^2 + Y \cdot X \cdot o + Y \cdot o^2\right)^2 \ \ldots \\ + \ -2 \cdot Z \cdot o \cdot q \cdot \left(p \cdot X^2 + Y \cdot X \cdot o + Y \cdot o^2\right) \cdot (X \cdot p + Y \cdot o) \cdot \left(X^2 \cdot Y^2 - 2 \cdot X^2 \cdot Y \cdot p + 2 \cdot X^2 \cdot p^2 - 2 \cdot X \cdot Y^2 \cdot o + 4 \cdot X \cdot Y \cdot o \cdot p + 3 \cdot Y^2 \cdot o^2\right) \ \ldots \\ + \ q^2 \cdot (X \cdot p + Y \cdot o)^2 \cdot \left(X^2 \cdot Y - Y \cdot o^2 - 2 \cdot X^2 \cdot p - 2 \cdot X \cdot Y \cdot o\right)^2 \end{matrix}}}{2 \cdot o \cdot q \cdot (X \cdot p + Y \cdot o) \cdot (X \cdot Y - X \cdot p - Y \cdot o)} = 0$$



$N_1 = 1.00000$

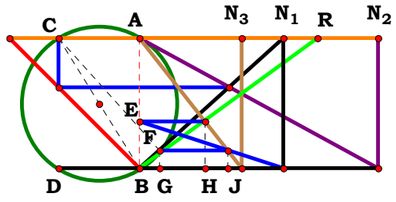
$N_2 = 2.00000$

$N_3 = 0.60000$

$R = 0.73205$

$$\frac{\sqrt{((N_2^2 \cdot N_3^2 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)^2) + ((N_1 \cdot N_2 \cdot (N_1 - 2) - N_2 - 2 \cdot N_1^2)^2 \cdot (N_1 + N_2)^2)) - (2 \cdot N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2) \cdot (N_1 + N_2) \cdot (N_1 \cdot N_2 \cdot (N_1 - 2) \cdot (N_2 - 2) + 2 \cdot N_1^2 + 3 \cdot N_2^2))} - (N_2 \cdot ((((N_1 + N_2 + N_1^2 \cdot N_2) - N_1^2 \cdot N_3) + N_1^3) - N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3))}{2 \cdot (N_1 + N_2) \cdot ((N_1 + N_2) - N_1 \cdot N_2)} - R = 0.00000$$

4RST8AB4R11



$N_1 = 1.10159$
$N_2 = 1.82802$
$N_3 = 0.78668$
$R = 1.36734$

Unit. $AB := 1$ **Given.** $N_1 := 1.10159$ $N_2 := 1.82802$ $N_3 := .78668$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BN_1 := \sqrt{AB^2 + N_1{}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BJ := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BJ}$$

$$BH := N_3 \cdot (AB - BE) \qquad R := \frac{BH}{BE} \qquad R = 1.367376$$

Definitions.

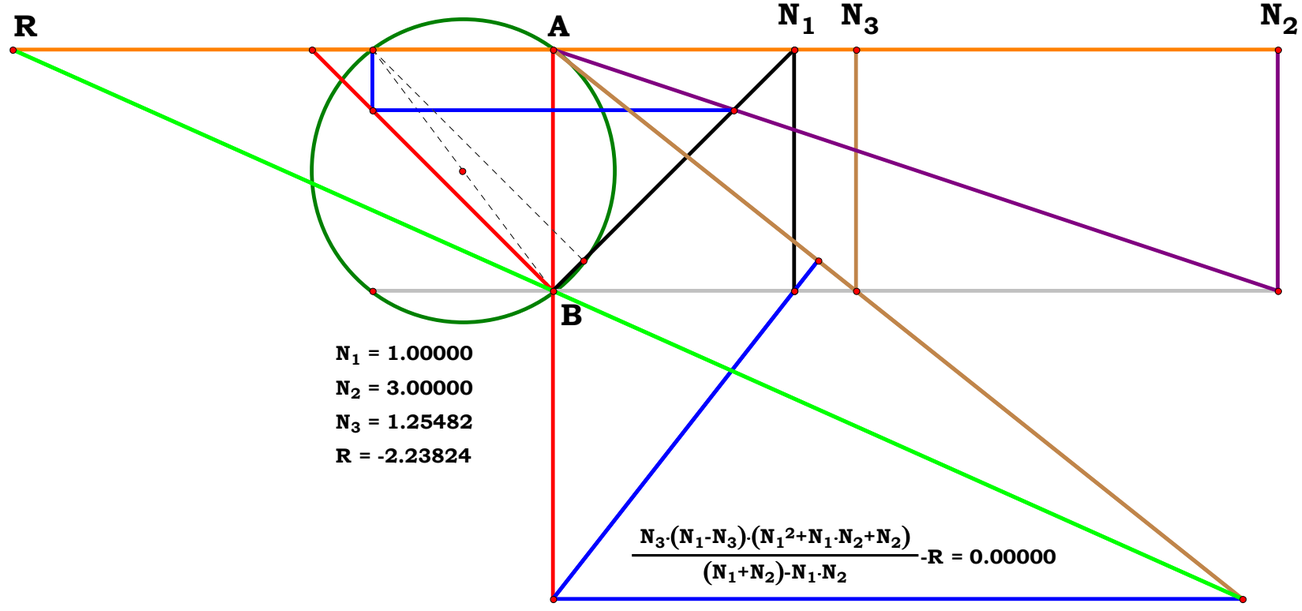
$$R - \frac{N_3 \cdot (N_1 - N_3) \cdot (N_1{}^2 + N_1 \cdot N_2 + N_2)}{N_1 + N_2 - N_1 \cdot N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u{}^2 \cdot (C - A) \cdot [A^2 + N_u \cdot (A + B)]}{A^2 \cdot C^2 \cdot (A + B - N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

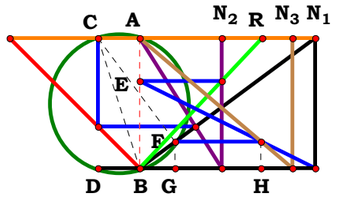
$$R - \frac{Z \cdot (X \cdot q - Z \cdot o) \cdot (p \cdot X^2 + Y \cdot X \cdot o + Y \cdot o^2)}{o^2 \cdot q^2 \cdot (X \cdot p - X \cdot Y + Y \cdot o)} = 0$$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 1.25482$
$R = -2.23824$

$$\frac{N_3 \cdot (N_1 - N_3) \cdot (N_1{}^2 + N_1 \cdot N_2 + N_2)}{(N_1 + N_2) - N_1 \cdot N_2} - R = 0.00000$$

4RST8AB4R12



$N_1 = 1.34373$
$N_2 = 0.62698$
$N_3 = 1.17412$
$R = 0.93569$

Unit. $AB := 1$ Given. $N_1 := 1.34373$ $N_2 := .62698$ $N_3 := 1.17412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BH := N_3 \cdot (AB - FG)$ $BE := \frac{FG \cdot N_1}{N_1 - BH}$

$R := \frac{N_2}{BE}$ $R = 0.935678$

Definitions.

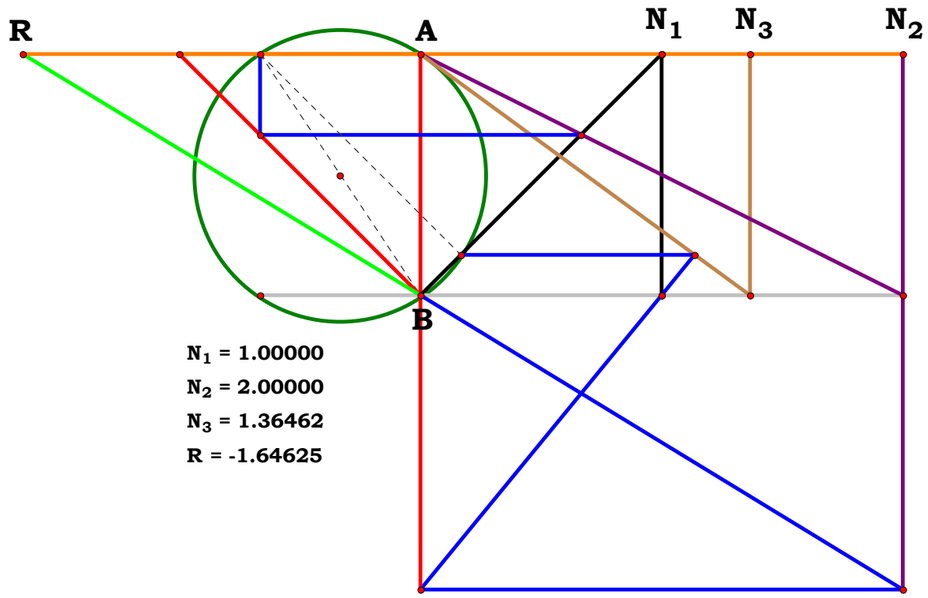
$$R - \frac{N_2 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) - N_2 \cdot N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)}{N_1 + N_2 - N_1 \cdot N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot \left[N_u^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right]}{A^2 \cdot B \cdot C \cdot (A + B - N_u)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

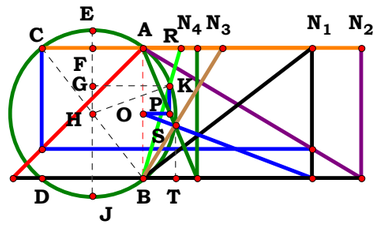
$$R - \frac{Y \cdot q \cdot (X^2 + o^2) \cdot (X \cdot p + Y \cdot o) - Z \cdot Y \cdot o \cdot (p \cdot X^2 + Y \cdot X \cdot o + Y \cdot o^2)}{o^2 \cdot p \cdot q \cdot (X \cdot p - X \cdot Y + Y \cdot o)} = 0$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 1.36462$
$R = -1.64625$

$$\frac{N_2 \cdot (N_1^2 + 1) \cdot (N_1 + N_2) - N_2 \cdot N_3 \cdot (N_1^2 + N_1 \cdot N_2 + N_2)}{(N_1 + N_2) - N_1 \cdot N_2} - R = 0.00000$$

4RST8AB5R0



$N_1 = 1.29530$
$N_2 = 1.67305$
$N_3 = 0.61234$
$N_4 = 0.41626$
$R = 0.29129$

Unit. $AB := 1$ Given. $N_1 := 1.2953$ $N_2 := 1.67305$ $N_3 := .61234$ $N_4 := .41626$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $EF := \frac{EJ - AB}{2}$

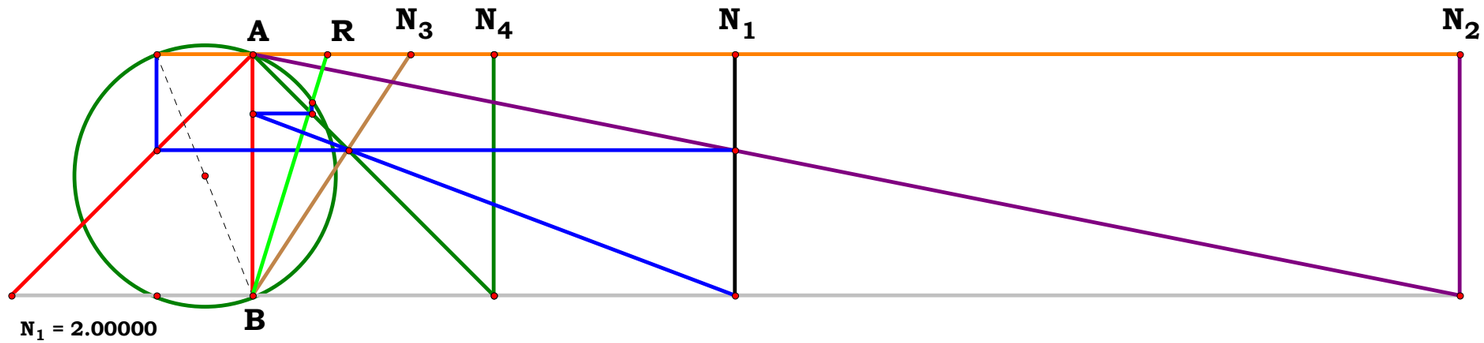
$AF := \frac{AC}{2}$ $HK := \frac{EJ}{2}$ $ST := \frac{N_4}{N_4 + N_3}$

$BT := N_3 \cdot ST$ $TU := N_1 - BT$ $BO := \frac{ST \cdot N_1}{TU}$

$OP := N_4 - N_4 \cdot BO$ $GK := AF + OP$

$GH := \sqrt{HK^2 - GK^2}$ $EG := HK - GH$

$GJ := EJ - EG$ $R := \frac{OP}{GJ - EF}$ $R = 0.291293$



$N_1 = 2.00000$
$N_2 = 5.00000$
$N_3 = 0.65349$
$N_4 = 1.00000$
$R = 0.30731$

$$\frac{(2\cdot(N_1-N_4)\cdot N_3\cdot N_4\cdot\sqrt{N_2})}{\sqrt{(N_1{}^2\cdot N_2\cdot N_4{}^2)-(N_3{}^2\cdot(N_1-N_4)^2\cdot(4\cdot N_4\cdot(N_1+N_2\cdot N_4)-N_2))-(2\cdot N_1\cdot N_3\cdot N_4\cdot(N_1-N_4)\cdot(2\cdot N_1\cdot N_4-N_2))}+(\sqrt{N_2}\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4))} - R = 0.00000$$

Definitions.

$$R - \frac{2\cdot\sqrt{N_2}\cdot N_3\cdot N_4\cdot(N_1-N_4)}{\sqrt{N_1{}^2\cdot N_2\cdot N_4{}^2 - N_3{}^2\cdot(N_1-N_4)^2\cdot[4\cdot N_4\cdot(N_1+N_2\cdot N_4)-N_2] - 2\cdot N_1\cdot N_3\cdot N_4\cdot(N_1-N_4)\cdot(2\cdot N_1\cdot N_4-N_2)} + \sqrt{N_2}\cdot(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4)} = 0$$

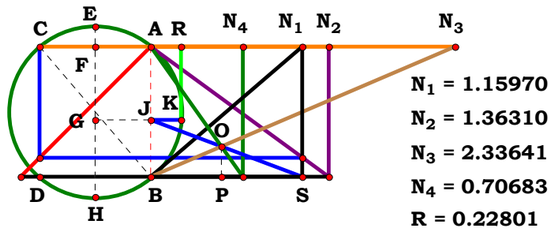
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{2\cdot(\sqrt{N_u})^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D) - \sqrt{B}\cdot\sqrt{N_u\cdot[A\cdot D^2\cdot(C-A+D)^2 - 4\cdot A\cdot N_u{}^2\cdot(A-D)^2 + 4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)]}} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{2\cdot\sqrt{X}\cdot Y\cdot Z\cdot(W\cdot p - Z\cdot m)\cdot\sqrt{m}}{\sqrt{W^2\cdot X\cdot Z^2\cdot m\cdot o^2\cdot p^2 - Y^2\cdot(W\cdot p - Z\cdot m)^2\cdot(4\cdot X\cdot m\cdot Z^2 + 4\cdot W\cdot n\cdot Z\cdot p - X\cdot m\cdot p^2) - 2\cdot Y\cdot W\cdot Z\cdot o\cdot p\cdot(W\cdot p - Z\cdot m)\cdot(2\cdot W\cdot Z\cdot n - X\cdot m\cdot p) + \sqrt{m}\cdot\sqrt{X}\cdot p\cdot(W\cdot Y\cdot p + W\cdot Z\cdot o - Y\cdot Z\cdot m)} = 0$$

4RST8AB5R1



$N_1 = 1.15970$
$N_2 = 1.36310$
$N_3 = 2.33641$
$N_4 = 0.70683$
$R = 0.22801$

Unit. $AB := 1$ **Given.** $N_1 := 1.15970$ $N_2 := 1.36310$ $N_3 := 2.33641$ $N_4 := .70683$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

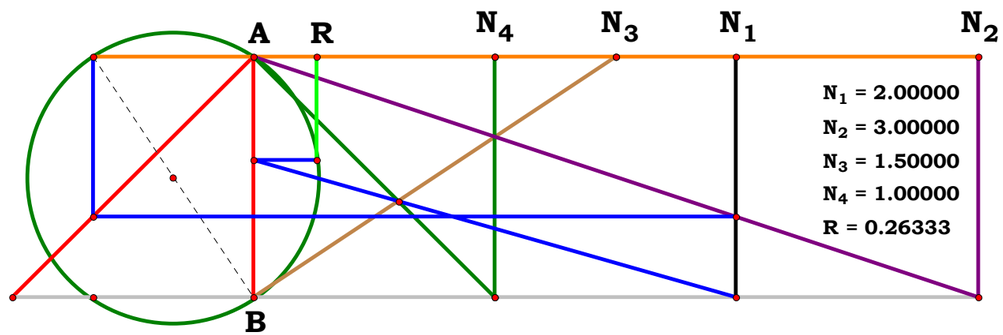
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.228007$



$$\frac{\sqrt{(N_1 \cdot N_3 \cdot (N_1 - N_4))^2 + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2) \cdot (N_1 - N_4)) + (N_1^4 \cdot N_4^2)} - (N_1 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))}{(2 \cdot N_2 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot N_2 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

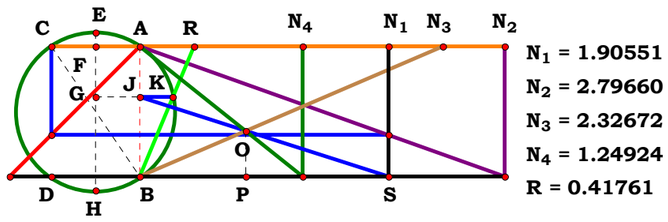
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot (A - C - D) + \sqrt{B^2 \cdot C^2 + B^2 \cdot (A - D)^2 - 2 \cdot C \cdot (2 \cdot A^2 + B^2) \cdot (A - D)}}{2 \cdot A \cdot (C - A + D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot W^2 \cdot n^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot (W^2 \cdot n^2 + 2 \cdot X^2 \cdot m^2) \cdot (W \cdot p - Z \cdot m) + W^4 \cdot Z^2 \cdot n^2 \cdot o^2} - W \cdot n \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot X \cdot m \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

4RST8AB5R2



$N_1 = 1.90551$
$N_2 = 2.79660$
$N_3 = 2.32672$
$N_4 = 1.24924$
$R = 0.41761$

Unit. $AB := 1$ Given. $N_1 := 1.90551$ $N_2 := 2.79660$ $N_3 := 2.32672$ $N_4 := 1.24924$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

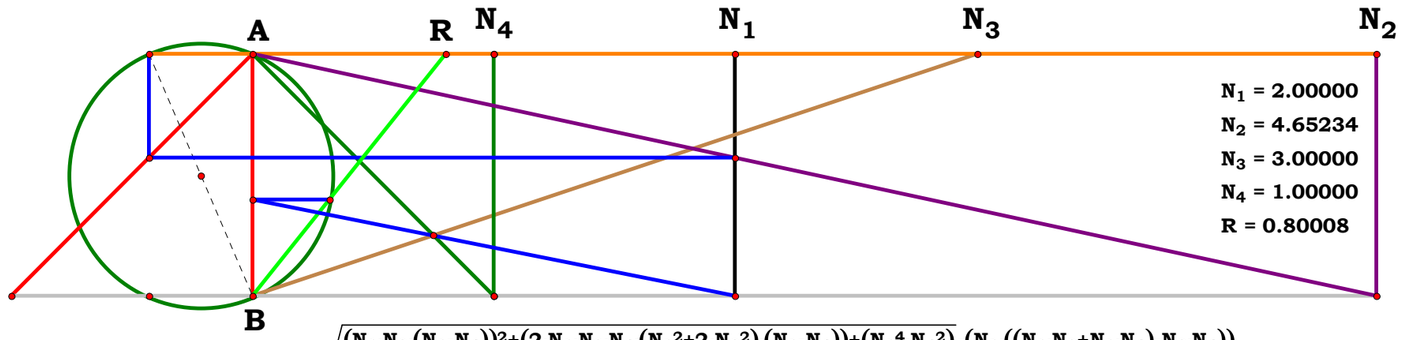
$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$ $GH := BJ + EF$

$EG := EH - GH$ $GK := \sqrt{EG \cdot GH}$

$R := \frac{GK - AF}{BJ}$ $R = 0.417606$



$$\frac{\sqrt{(N_1 \cdot N_3 \cdot (N_1 - N_4))^2 + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2) \cdot (N_1 - N_4)) + (N_1^4 \cdot N_4^2)} - (N_1 \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4))}{(2 \cdot N_1 \cdot N_2 \cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_1 - N_4)^2 + 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1^2 + 2 \cdot N_2^2) \cdot (N_1 - N_4) + N_1^4 \cdot N_4^2} - N_1 \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)}{2 \cdot N_1 \cdot N_2 \cdot N_4} = 0$$

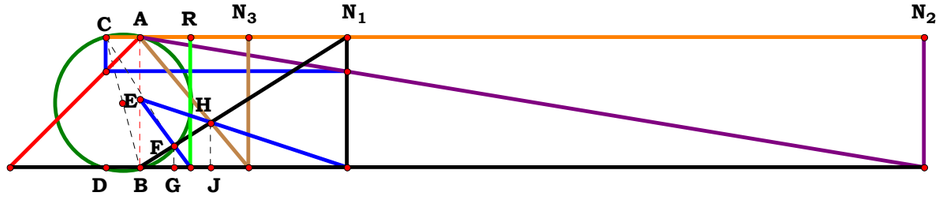
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{B \cdot (A - C - D) + \sqrt{B^2 \cdot C^2 + B^2 \cdot (A - D)^2 - 2 \cdot C \cdot (2 \cdot A^2 + B^2) \cdot (A - D)}}{2 \cdot A \cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2 \cdot W^2 \cdot n^2 \cdot (W \cdot p - Z \cdot m)^2 + 2 \cdot Y \cdot W \cdot Z \cdot o \cdot (W^2 \cdot n^2 + 2 \cdot X^2 \cdot m^2) \cdot (W \cdot p - Z \cdot m) + W^4 \cdot Z^2 \cdot n^2 \cdot o^2} - W \cdot n \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)}{2 \cdot W \cdot X \cdot Z \cdot m \cdot o} = 0$$

4RST8AB5R4



$N_1 = 1.58588$
$N_2 = 6.01228$
$N_3 = 0.83511$
$R = 0.38271$

Unit. $AB := 1$ **Given.** $N_1 := 1.58588$ $N_2 := 6.01228$

$N_3 := .83511$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

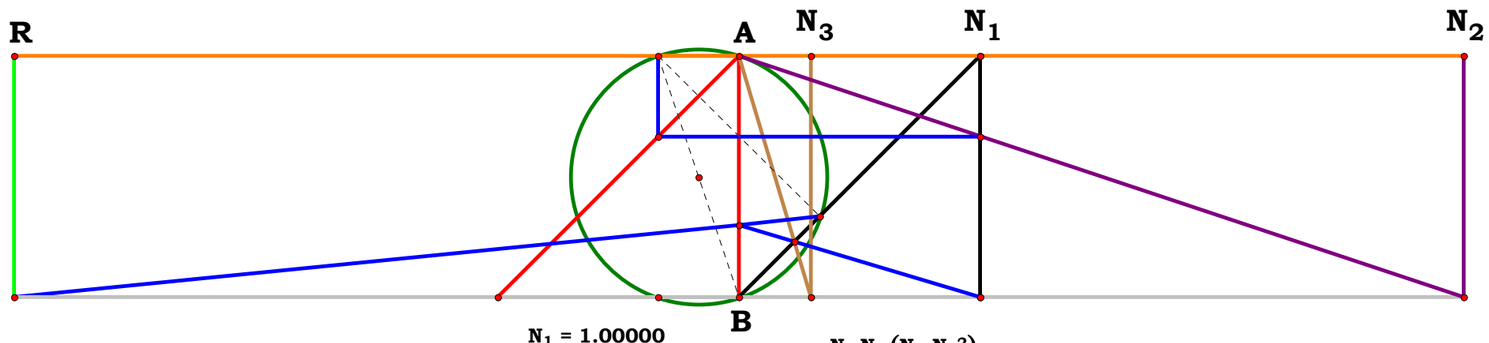
$AC := \frac{N_1}{N_2}$ $HJ := \frac{N_3}{N_1 + N_3}$

$BJ := N_1 \cdot HJ$ $BN_1 := \sqrt{AB^2 + N_1{}^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{HJ \cdot N_1}{N_1 - BJ}$ $R := \frac{BE \cdot BG}{BE - FG}$ $R = 0.382713$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 0.30000$
$R = -3.00000$

$\frac{N_1 \cdot N_3 \cdot (N_2 - N_1{}^2)}{N_2 \cdot N_3 \cdot (N_1{}^2 + 1) + (N_1{}^2 - N_2)} - R = 0.00000$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot (N_2 - N_1{}^2)}{N_2 \cdot N_3 \cdot (N_1{}^2 + 1) + N_1 \cdot (N_1{}^2 - N_2)} = 0$$

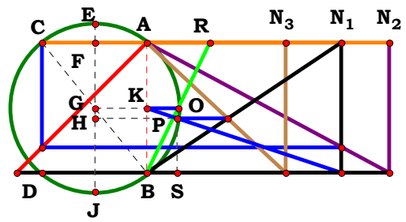
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot (A^2 - B \cdot N_u)}{A^2 \cdot (A - C) + N_u \cdot (B \cdot C + A \cdot N_u)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot Z \cdot (Y \cdot o^2 - X^2 \cdot p)}{Y \cdot o \cdot (Z \cdot X^2 - q \cdot X \cdot o + Z \cdot o^2) + X^3 \cdot p \cdot q} = 0$$

4RST8AB5R5



$N_1 = 1.48902$
$N_2 = 1.85708$
$N_3 = 1.06757$
$R = 0.48409$

Unit. $AB := 1$ Given. $N_1 := 1.48902$ $N_2 := 1.85708$ $N_3 := 1.06757$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

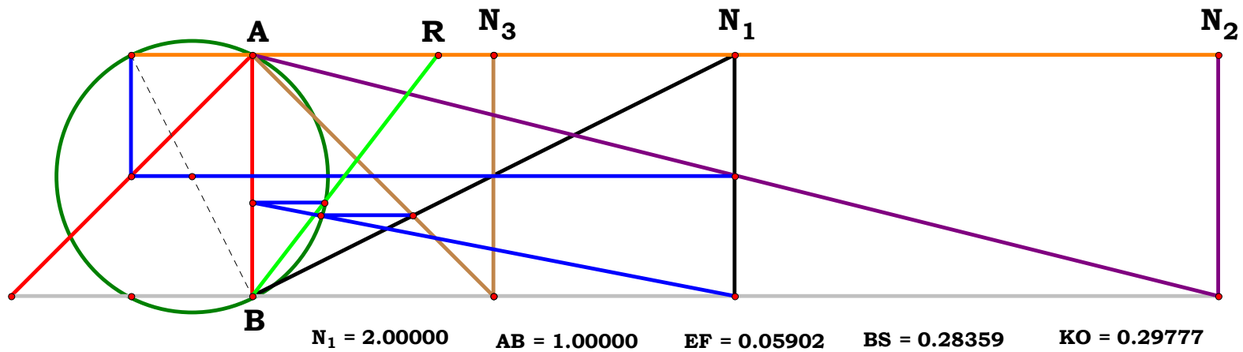
$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$

$$R := \frac{KO}{BK} \qquad R = 0.484091$$



$N_1 = 2.00000$ $AB = 1.00000$ $EF = 0.05902$ $BS = 0.28359$ $KO = 0.29777$
$N_2 = 4.00000$ $AC = 0.50000$ $PS = 0.33333$ $BK = 0.38841$ $R - \frac{KO}{BK} = 0.00000$
$N_3 = 1.00000$ $EJ = 1.11803$ $HJ = 0.39235$ $GJ = 0.44743$
$R = 0.76663$ $AF = 0.25000$ $HP = 0.53359$ $GO = 0.54777$

Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

$$AC - \frac{N_1}{N_2} = 0 \qquad EJ - \frac{\sqrt{N_1^2 + N_2^2}}{N_2} = 0 \qquad AF - \frac{N_1}{2 \cdot N_2} = 0 \qquad EF - \frac{\sqrt{N_1^2 + N_2^2} - N_2}{2 \cdot N_2} = 0$$

$$PS - \frac{N_3}{N_1 + N_3} = 0 \qquad HJ - \frac{N_2 \cdot N_3 - N_1 \cdot N_2 + \sqrt{N_1^2 + N_2^2} \cdot (N_1 + N_3)}{2 \cdot N_2 \cdot (N_1 + N_3)} = 0$$

$$HP - \frac{\sqrt{N_1 \cdot \left(N_1^3 + 2 \cdot N_1^2 \cdot N_3 + N_1 \cdot N_3^2 + 4 \cdot N_2^2 \cdot N_3\right)}}{2 \cdot N_2 \cdot (N_1 + N_3)} = 0$$

$$BS - \frac{\sqrt{N_1 \cdot \left(N_1^3 + 2 \cdot N_1^2 \cdot N_3 + N_1 \cdot N_3^2 + 4 \cdot N_2^2 \cdot N_3\right)} - N_1^2 - N_1 \cdot N_3}{2 \cdot N_2 \cdot (N_1 + N_3)} = 0$$

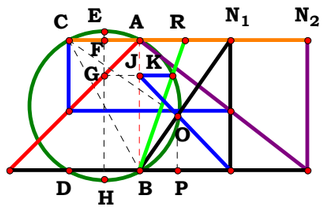
$$BK - \frac{2 \cdot N_1 \cdot N_3 \cdot N_2}{2 \cdot N_1^2 \cdot N_2 + N_1^2 - \sqrt{N_1 \cdot \left(N_1^3 + 2 \cdot N_1^2 \cdot N_3 + N_1 \cdot N_3^2 + 4 \cdot N_2^2 \cdot N_3\right)} + N_1 \cdot N_3 + 2 \cdot N_1 \cdot N_2 \cdot N_3} = 0$$

$$GJ - \frac{\left(N_2 - \sqrt{N_1^2 + N_2^2}\right) \cdot \sqrt{N_1^4 + 2 \cdot N_1^3 \cdot N_3 + N_1^2 \cdot N_3^2 + 4 \cdot N_1 \cdot N_2^2 \cdot N_3} + \sqrt{N_1^2 + N_2^2} \cdot \left[N_1 \cdot (2 \cdot N_2 + 1) \cdot (N_1 + N_3)\right] - N_1 \cdot N_2 \cdot \left(N_1 + N_3 + 2 \cdot N_1 \cdot N_2 - 2 \cdot N_2 \cdot N_3\right)}{2 \cdot N_2 \cdot \left(2 \cdot N_1^2 \cdot N_2 + N_1^2 - \sqrt{N_1^4 + 2 \cdot N_1^3 \cdot N_3 + N_1^2 \cdot N_3^2 + 4 \cdot N_1 \cdot N_2^2 \cdot N_3} + N_1 \cdot N_3 + 2 \cdot N_1 \cdot N_2 \cdot N_3\right)} = 0$$

$$GO - \sqrt{GJ \cdot (EJ - GJ)} = 0 \qquad KO - (GO - AF) = 0$$

$$R - \frac{KO}{BK} = 0$$

4RST8AB5R6



$N_1 = 0.69478$
$N_2 = 1.28562$
$R = 0.34426$

Unit. $AB := 1$ Given. $N_1 := .69478$ $N_2 := 1.28562$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

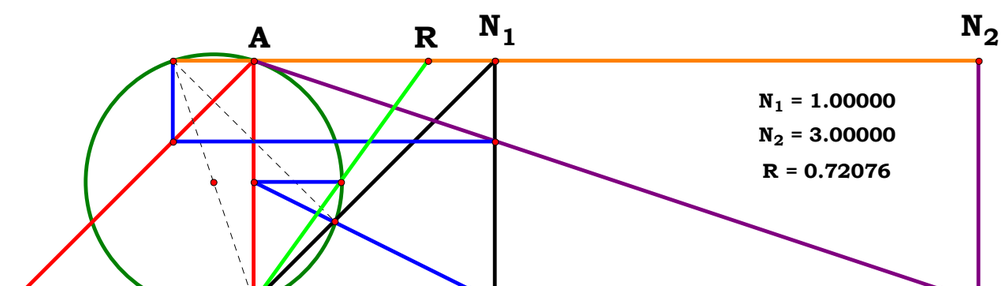
$EF := \frac{EH - AB}{2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BO := BN_1 - ON_1$

$BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$ $BJ := \frac{OP \cdot N_1}{N_1 - BP}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$JK := GK - AF$ $R := \frac{JK}{BJ}$ $R = 0.34425$



$N_1 = 1.00000$
$N_2 = 3.00000$
$R = 0.72076$

$$\frac{B}{\frac{(N_1^3 \cdot N_2 + N_1^3) - \sqrt{(((N_1^6 \cdot (N_2+1)^2) - (4 \cdot N_1^4 \cdot N_2^2 \cdot (N_2+2))) + (4 \cdot N_1^2 \cdot N_2^3 \cdot (N_2+3))) - (4 \cdot N_2^4)}}{(2 \cdot N_2 \cdot (N_1^2 - N_2))} - R} = 0.00000$$

Definitions.

$$R - \frac{N_1^3 \cdot N_2 + N_1^3 - \sqrt{N_1^6 \cdot (N_2+1)^2 - 4 \cdot N_1^4 \cdot N_2^2 \cdot (N_2+2) + 4 \cdot N_1^2 \cdot N_2^3 \cdot (N_2+3) - 4 \cdot N_2^4}}{2 \cdot N_2 \cdot (N_1^2 - N_2)} = 0$$

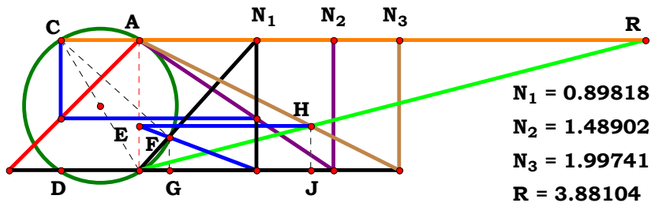
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{\sqrt{4 \cdot A^4 \cdot N_u \cdot (3 \cdot B + N_u) + B^2 \cdot N_u^4 - 2 \cdot N_u^3 \cdot B \cdot (2 \cdot A^2 - B^2) - N_u^2 \cdot B^2 \cdot (8 \cdot A^2 - B^2) - 4 \cdot A^6} - B \cdot N_u \cdot (B + N_u)}{2 \cdot A \cdot (A^2 - B \cdot N_u)} = 0$$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y^3 \cdot q \cdot (Z+q) - \sqrt{Y^6 \cdot q^2 \cdot (Z+q)^2 - 4 \cdot Y^4 \cdot Z^2 \cdot p^2 \cdot q \cdot (Z+2 \cdot q) + 4 \cdot Y^2 \cdot Z^3 \cdot p^4 \cdot (Z+3 \cdot q) - 4 \cdot Z^4 \cdot p^6}}{2 \cdot Z \cdot p \cdot (Y^2 \cdot q - Z \cdot p^2)} = 0$$

4RST8AB5R7



$N_1 = 0.89818$
$N_2 = 1.48902$
$N_3 = 1.99741$
$R = 3.88104$

Unit. $AB := 1$ **Given.** $N_1 := .89818$ $N_2 := 1.48902$ $N_3 := 1.99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

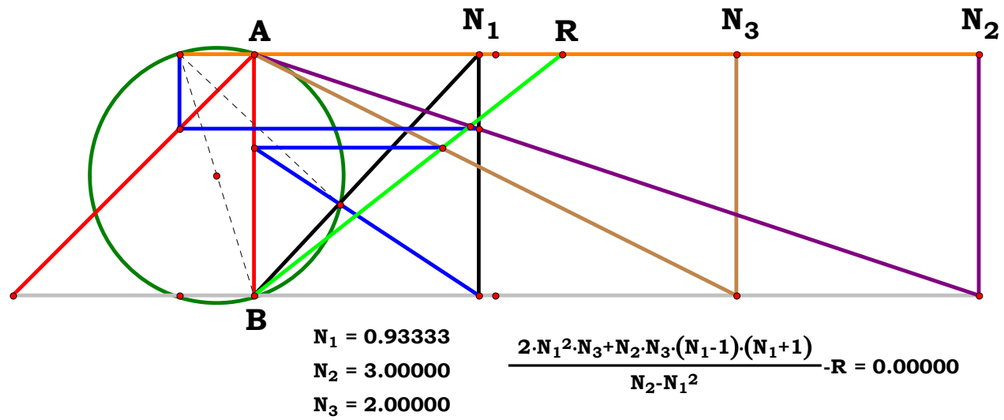
$AC := \frac{N_1}{N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $BJ := N_3 \cdot (AB - BE)$

$R := \frac{BJ}{BE}$ $R = 3.880889$



$N_1 = 0.93333$
$N_2 = 3.00000$
$N_3 = 2.00000$
$R = 1.27349$

$\frac{2 \cdot N_1^2 \cdot N_3 + N_2 \cdot N_3 \cdot (N_1 - 1) \cdot (N_1 + 1)}{N_2 - N_1^2} - R = 0.00000$

Definitions.

$R - \frac{2 \cdot N_1^2 \cdot N_3 + N_2 \cdot N_3 \cdot (N_1 - 1) \cdot (N_1 + 1)}{N_2 - N_1^2} = 0$

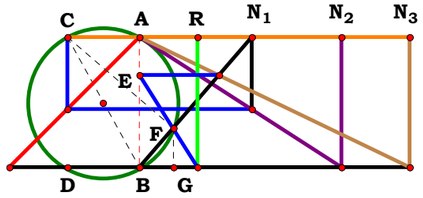
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u^3 - N_u \cdot (A^2 - 2 \cdot B \cdot N_u)}{A^2 \cdot C - B \cdot C \cdot N_u} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{X^2 \cdot Y \cdot Z - Y \cdot Z \cdot o^2 + 2 \cdot X^2 \cdot Z \cdot p}{Y \cdot o^2 \cdot q - X^2 \cdot p \cdot q} = 0$

4RST8AB5R8



$N_1 = 0.85944$
$N_2 = 1.54713$
$N_3 = 2.07489$
$R = 0.44930$

Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 1.54713$ $N_3 := 2.07489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

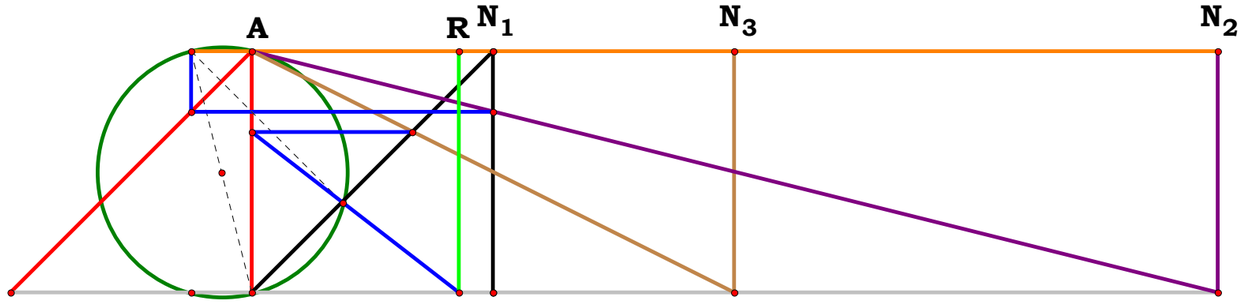
Descriptions.

$AC := \frac{N_1}{N_2}$ $BE := \frac{N_3}{N_1 + N_3}$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$

$BF := BN_1 - FN_1$ $BG := \frac{N_1 \cdot BF}{BN_1}$

$FG := \frac{BG}{N_1}$ $R := \frac{BG \cdot BE}{BE - FG}$ $R = 0.4493$



Definitions.

$$R - \frac{N_3 \cdot (N_2 - N_1^2)}{N_1^2 - N_2 + N_1 \cdot N_3 \cdot (N_2 + 1)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{N_u \cdot (A^2 - B \cdot N_u)}{A \cdot N_u^2 - C \cdot A^2 + B \cdot N_u \cdot (A + C)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

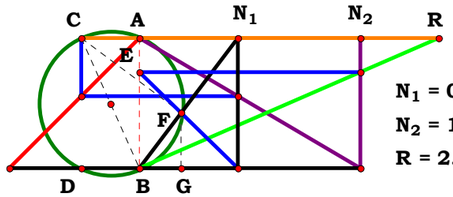
$$R - \frac{Z \cdot (Y \cdot o^2 - X^2 \cdot p)}{Y \cdot o \cdot (X \cdot Z - o \cdot q) + X \cdot p \cdot (X \cdot q + Z \cdot o)} = 0$$

B

$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$
$R = 0.85714$

$$\frac{N_3 \cdot (N_2 - N_1^2)}{(N_1^2 - N_2) + N_1 \cdot N_3 \cdot (N_2 + 1)} - R = 0.00000$$

4RST8AB5R9



$N_1 = 0.75290$
$N_2 = 1.69242$
$R = 2.29484$

Unit. $AB := 1$ Given. $N_1 := .75290$ $N_2 := 1.69242$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

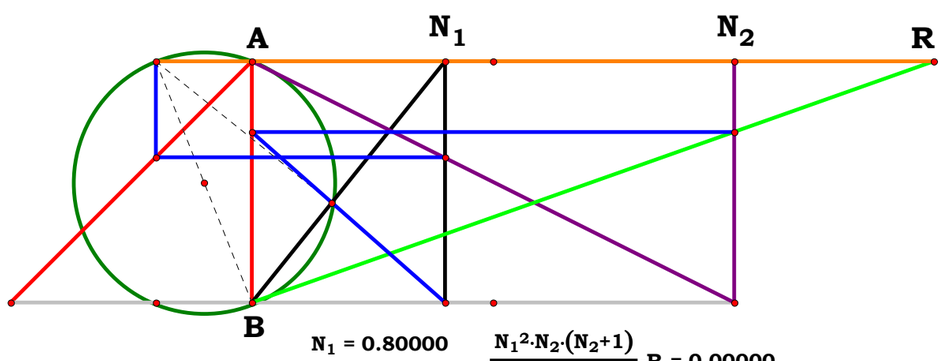
$AC := \frac{N_1}{N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $R := \frac{N_2}{BE}$

$R = 2.29486$



$N_1 = 0.80000$ $\frac{N_1^2 \cdot N_2 \cdot (N_2+1)}{N_2 - N_1^2} - R = 0.00000$

$N_2 = 2.00000$

$R = 2.82353$

Definitions.

$R - \frac{N_1^2 \cdot N_2 \cdot (N_2 + 1)}{N_2 - N_1^2} = 0$

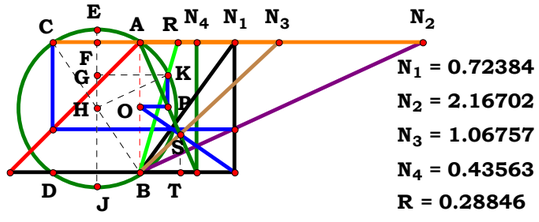
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$R - \frac{N_u^2 \cdot (B + N_u)}{B \cdot (A^2 - B \cdot N_u)} = 0$

$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$R - \frac{Y^2 \cdot Z \cdot (Z + q)}{q \cdot (Z \cdot p^2 - Y^2 \cdot q)} = 0$

4RST8AB6R0



$N_1 = 0.72384$
$N_2 = 2.16702$
$N_3 = 1.06757$
$N_4 = 0.43563$
$R = 0.28846$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2} \qquad EF := \frac{EJ - AB}{2}$$

$$AF := \frac{AC}{2} \qquad HK := \frac{EJ}{2} \qquad ST := \frac{N_4}{N_4 + N_3} \qquad BT := N_3 \cdot ST$$

$$TU := N_1 - BT \qquad BO := \frac{ST \cdot N_1}{TU} \qquad OP := N_4 - N_4 \cdot BO$$

$$GK := AF + OP \qquad GH := \sqrt{HK^2 - GK^2} \qquad EG := HK - GH$$

$$GJ := EJ - EG \qquad R := \frac{OP}{GJ - EF} \qquad R = 0.288461$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_3 \cdot N_4 \cdot (N_1 - N_4)}{\sqrt{N_3^2 \cdot (N_1 - N_4)^2 \cdot (N_2 - 4 \cdot N_2 \cdot N_4^2 + 4 \cdot N_1 \cdot N_4 - 4 \cdot N_2 \cdot N_4) + 2 \cdot N_3 \cdot N_1 \cdot N_4 \cdot (N_1 - N_4) \cdot (N_2 + 2 \cdot N_1 \cdot N_4 - 2 \cdot N_2 \cdot N_4) + N_1^2 \cdot N_2 \cdot N_4^2} + \sqrt{N_2} \cdot (N_1 \cdot N_3 + N_1 \cdot N_4 - N_3 \cdot N_4)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0 \qquad N_4 - \frac{N_u}{D} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^3 \cdot (A - D) \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot D \cdot (A - C - D) - \sqrt{B} \cdot \sqrt{N_u \cdot \left[A \cdot D^2 \cdot (C - A + D)^2 - 4 \cdot A \cdot N_u^2 \cdot (A - D)^2 + 4 \cdot D \cdot N_u \cdot (A - B) \cdot (A - D) \cdot (C - A + D)\right]}} = 0$$

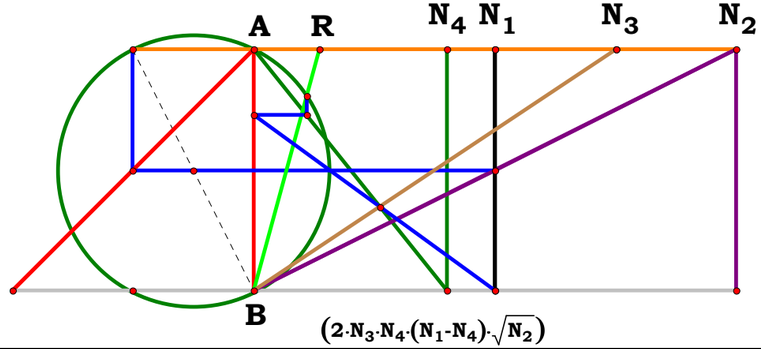
$$N_1 - \frac{W}{m} = 0 \qquad N_2 - \frac{X}{n} = 0 \qquad N_3 - \frac{Y}{o} = 0 \qquad N_4 - \frac{Z}{p} = 0$$

$$R - \frac{2 \cdot \sqrt{X} \cdot Y \cdot Z \cdot (W \cdot p - Z \cdot m) \cdot \sqrt{m}}{\sqrt{Y^2 \cdot (W \cdot p - Z \cdot m)^2 \cdot \left(X \cdot m \cdot p^2 - 4 \cdot X \cdot Z^2 \cdot m + 4 \cdot W \cdot Z \cdot n \cdot p - 4 \cdot X \cdot Z \cdot m \cdot p\right) \ \ldots \\ + \ 2 \cdot Y \cdot W \cdot Z \cdot o \cdot p \cdot (W \cdot p - Z \cdot m) \cdot (2 \cdot W \cdot Z \cdot n - 2 \cdot X \cdot Z \cdot m + X \cdot m \cdot p) + W^2 \cdot X \cdot Z^2 \cdot m \cdot o^2 \cdot p^2} + \sqrt{m} \cdot \sqrt{X} \cdot p \cdot (W \cdot Y \cdot p + W \cdot Z \cdot o - Y \cdot Z \cdot m)} = 0$$

Unit. $AB := 1$ **Given.** $N_1 := .72384$ $N_2 := 2.16702$ $N_3 := 1.06757$ $N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

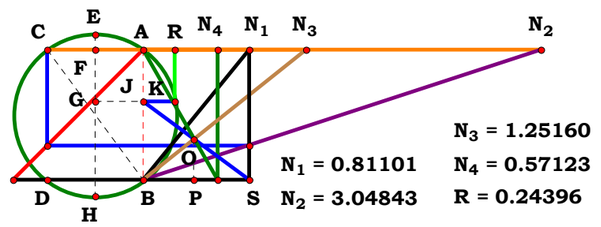
$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 1.50000$
$N_4 = 0.80000$
$R = 0.27088$

$$\frac{\left(2 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot \sqrt{N_2}\right)}{\sqrt{\left(N_3^2 \cdot (N_1 - N_4)^2 \cdot (N_2 + 4 \cdot N_4 \cdot (N_1 - N_2 - N_2 \cdot N_4)) + (2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot (N_1 - N_4) \cdot (N_2 + 2 \cdot N_4 \cdot (N_1 - N_2))) + \left(N_1^2 \cdot N_2 \cdot N_4^2\right) + \sqrt{N_2} \cdot ((N_1 \cdot N_3 + N_1 \cdot N_4) - N_3 \cdot N_4)\right.}} - R = 0.00000$$

4RST8AB6R1



Unit. $AB := 1$ **Given.** $N_1 := .81101$ $N_2 := 3.04843$ $N_3 := 1.25160$ $N_4 := .57123$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

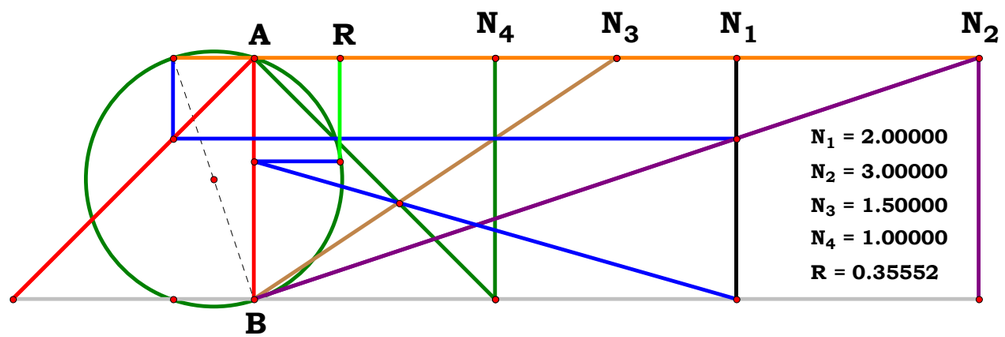
$AF := \frac{AC}{2}$ $EF := \frac{EH - AB}{2}$

$OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$

$GH := BJ + EF$ $GK := \sqrt{GH \cdot (EH - GH)}$

$R := GK - AF$ $R = 0.243965$



$$\frac{\sqrt{((N_1-N_2)^2\cdot((N_1-N_4)^2\cdot N_3^2+N_1^2\cdot N_4^2))+(2\cdot N_1\cdot N_3\cdot N_4\cdot((N_1^2-2\cdot N_1\cdot N_2)+3\cdot N_2^2)\cdot(N_1-N_4))}+(N_1-N_2)\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)}{2\cdot N_2\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{(N_1-N_2)^2\cdot\left[(N_1-N_4)^2\cdot N_3{}^2+N_1{}^2\cdot N_4{}^2\right]+2\cdot N_1\cdot N_3\cdot N_4\cdot\left(N_1{}^2-2\cdot N_1\cdot N_2+3\cdot N_2{}^2\right)\cdot(N_1-N_4)}+(N_1-N_2)\cdot(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4)}{2\cdot N_2\cdot(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4)} = 0$$

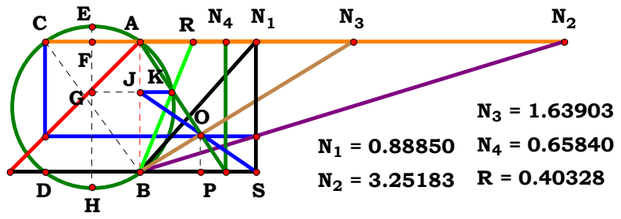
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{2\cdot A\cdot(C-A+D)} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2\cdot(W\cdot p-Z\cdot m)^2\cdot(W\cdot n-X\cdot m)^2+2\cdot Y\cdot W\cdot Z\cdot o\cdot\left(W^2\cdot n^2-2\cdot W\cdot X\cdot m\cdot n+3\cdot X^2\cdot m^2\right)\cdot(W\cdot p-Z\cdot m)+W^2\cdot Z^2\cdot o^2\cdot(W\cdot n-X\cdot m)^2}+(W\cdot Y\cdot p+W\cdot Z\cdot o-Y\cdot Z\cdot m)\cdot(W\cdot n-X\cdot m)}{2\cdot X\cdot m\cdot(W\cdot Y\cdot p+W\cdot Z\cdot o-Y\cdot Z\cdot m)} = 0$$

4RST8AB6R2



$N_3 = 1.63903$
$N_1 = 0.88850$ $N_4 = 0.65840$
$N_2 = 3.25183$ $R = 0.40328$

Unit. $AB := 1$ Given. $N_1 := .88850$ $N_2 := 3.25183$ $N_3 := 1.63903$ $N_4 := .65840$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

$W := 20$ $X := 19$ $Y := 18$ $Z := 17$ $m := \frac{W}{N_1}$ $n := \frac{X}{N_2}$ $o := \frac{Y}{N_3}$ $p := \frac{Z}{N_4}$

Descriptions.

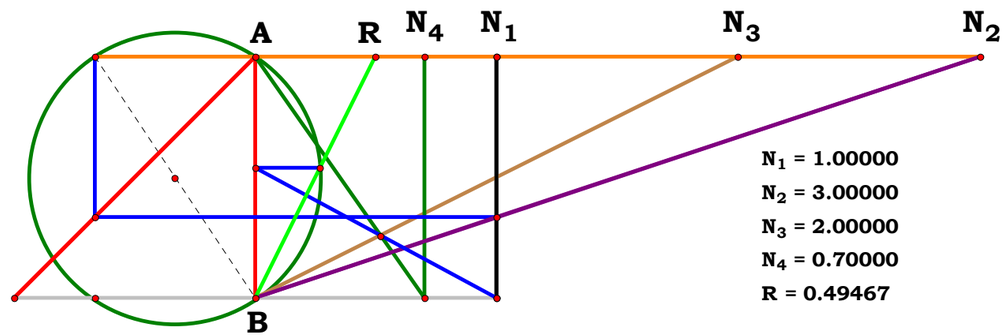
$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $OP := \frac{N_4}{N_3 + N_4}$ $BP := N_3 \cdot OP$

$PS := N_1 - BP$ $BJ := \frac{OP \cdot N_1}{PS}$ $GH := BJ + EF$

$EG := EH - GH$ $GK := \sqrt{EG \cdot GH}$

$R := \frac{GK - AF}{BJ}$ $R = 0.403288$



$N_1 = 1.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 0.70000$
$R = 0.49467$

$$\frac{\sqrt{((N_3^2\cdot(N_1-N_4)^2+N_1^2\cdot N_4^2)\cdot(N_1-N_2)^2)+(2\cdot N_1\cdot N_3\cdot N_4\cdot((N_1^2-2\cdot N_1\cdot N_2)+3\cdot N_2^2)\cdot(N_1-N_4))}+(N_1-N_2)\cdot((N_1\cdot N_3+N_1\cdot N_4)-N_3\cdot N_4)}{2\cdot N_1\cdot N_2\cdot N_4} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{\left[N_3^2\cdot(N_1-N_4)^2+N_1^2\cdot N_4^2\right]\cdot(N_1-N_2)^2+2\cdot N_1\cdot N_3\cdot N_4\cdot\left(N_1^2-2\cdot N_1\cdot N_2+3\cdot N_2^2\right)\cdot(N_1-N_4)}+(N_1-N_2)\cdot(N_1\cdot N_3+N_1\cdot N_4-N_3\cdot N_4)}{2\cdot N_1\cdot N_2\cdot N_4} = 0$$

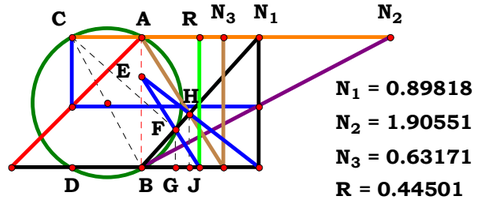
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_4 - \frac{N_u}{D} = 0$

$$R - \frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{2\cdot A\cdot C} = 0$$

$N_1 - \frac{W}{m} = 0$ $N_2 - \frac{X}{n} = 0$ $N_3 - \frac{Y}{o} = 0$ $N_4 - \frac{Z}{p} = 0$

$$R - \frac{\sqrt{Y^2\cdot(W\cdot p-Z\cdot m)^2\cdot(W\cdot n-X\cdot m)^2+2\cdot Y\cdot W\cdot Z\cdot o\cdot\left(W^2\cdot n^2-2\cdot W\cdot X\cdot m\cdot n+3\cdot X^2\cdot m^2\right)\cdot(W\cdot p-Z\cdot m)+W^2\cdot Z^2\cdot o^2\cdot(W\cdot n-X\cdot m)^2}+(W\cdot Y\cdot p+W\cdot Z\cdot o-Y\cdot Z\cdot m)\cdot(W\cdot n-X\cdot m)}{2\cdot W\cdot X\cdot Z\cdot m\cdot o} = 0$$

4RST8AB6R4



$N_1 = 0.89818$

$N_2 = 1.90551$

$N_3 = 0.63171$

$R = 0.44501$

Unit. $AB := 1$ **Given.** $N_1 := .89818$ $N_2 := 1.90551$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

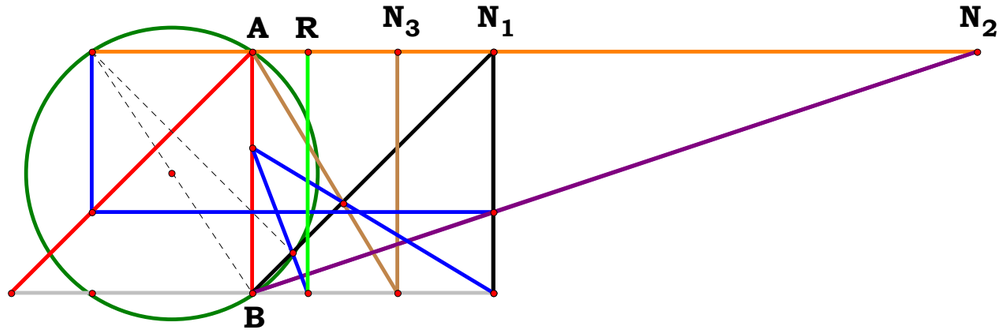
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad HJ := \frac{N_3}{N_1 + N_3} \qquad BJ := N_1 \cdot HJ$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BE := \frac{HJ \cdot N_1}{N_1 - BJ} \qquad R := \frac{BE \cdot BG}{BE - FG} \qquad R = 0.445008$$



$N_1 = 1.00000$

$N_2 = 3.00000$

$N_3 = 0.60000$

$R = 0.23077$

$$\frac{N_1 \cdot N_3 \cdot ((N_1^2 - N_1 \cdot N_2) + N_2)}{N_2 \cdot N_3 \cdot (N_1^2 + 1) - N_1 \cdot ((N_1^2 - N_1 \cdot N_2) + N_2)} - R = 0.00000$$

Definitions.

$$R - \frac{N_1 \cdot N_3 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)}{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) - N_1 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)} = 0$$

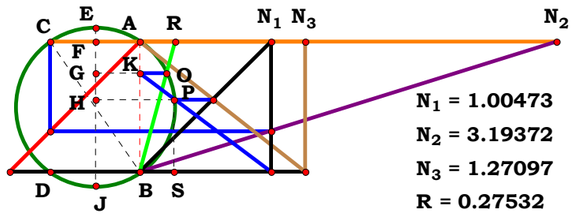
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot \left[A^2 - N_u \cdot (A - B)\right]}{A^3 - C \cdot A^2 + A \cdot N_u^2 + C \cdot N_u \cdot (A - B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{N_1 \cdot N_3 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)}{N_2 \cdot N_3 \cdot \left(N_1^2 + 1\right) - N_1 \cdot \left(N_1^2 - N_1 \cdot N_2 + N_2\right)} = 0$$

4RST8AB6R5



$N_1 = 1.00473$
$N_2 = 3.19372$
$N_3 = 1.27097$
$R = 0.27532$

Unit. $AB := 1$ **Given.** $N_1 := 1.00473$ $N_2 := 3.19372$ $N_3 := 1.27097$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

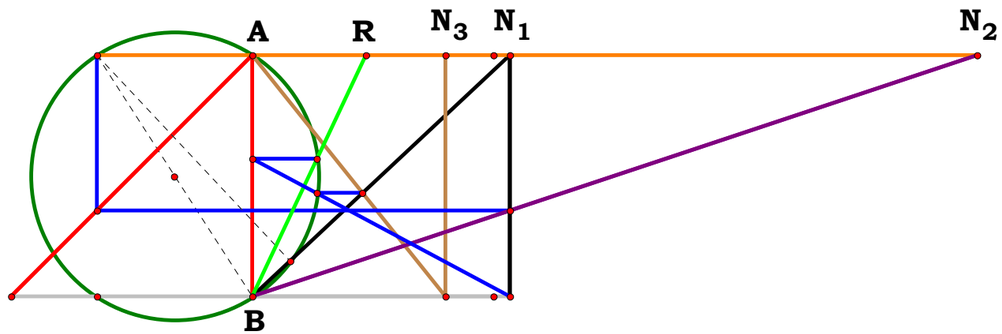
$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$



$N_1 = 1.06798$ $AB = 1.00000$ $EF = 0.09472$ $BS = 0.26837$ $KO = 0.26834$
$N_2 = 3.00000$ $AC = 0.64401$ $PS = 0.42827$ $BK = 0.57201$ $R - \frac{KO}{BK} = 0.00000$
$N_3 = 0.80000$ $EJ = 1.18943$ $HJ = 0.52299$ $GJ = 0.66673$
$R = 0.46911$ $AF = 0.32200$ $HP = 0.59037$ $GO = 0.59034$

$$R := \frac{KO}{BK} \qquad R = 0.275323$$

Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

$$AC - \frac{N_2 - N_1}{N_2} = 0 \qquad EJ - \frac{\sqrt{N_1^{\,2} - 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^{\,2}}}{N_2} = 0$$

$$AF - \frac{N_2 - N_1}{2 \cdot N_2} = 0 \qquad EF - \frac{\sqrt{N_1^{\,2} - 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^{\,2}} - N_2}{2 \cdot N_2} = 0$$

$$PS - \frac{N_3}{N_1 + N_3} = 0 \qquad HJ - \frac{\sqrt{N_1^{\,2} - 2 \cdot N_1 \cdot N_2 + 2 \cdot N_2^{\,2}} \cdot (N_1 + N_3) - N_1 \cdot N_2 + N_2 \cdot N_3}{2 \cdot N_2 \cdot (N_1 + N_3)} = 0$$

$$HP - \frac{\sqrt{N_1^{\,4} - 2 \cdot N_1^{\,3} \cdot N_2 + 2 \cdot N_1^{\,3} \cdot N_3 + N_1^{\,2} \cdot N_2^{\,2} - 4 \cdot N_1^{\,2} \cdot N_2 \cdot N_3 + N_1^{\,2} \cdot N_3^{\,2} + 6 \cdot N_1 \cdot N_2^{\,2} \cdot N_3 - 2 \cdot N_1 \cdot N_2 \cdot N_3^{\,2} + N_2^{\,2} \cdot N_3^{\,2}}}{2 \cdot N_2 \cdot (N_1 + N_3)} = 0$$

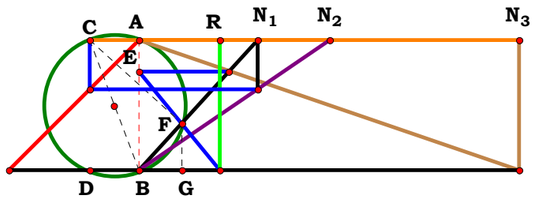
$$BS - (HP - AF) = 0$$

$$BK - \frac{PS \cdot N_1}{N_1 - BS} = 0 \qquad GJ - (BK + EF) = 0$$

$$GO - \sqrt{GJ \cdot (EJ - GJ)} = 0 \qquad KO - (GO - AF) = 0$$

$$R - \frac{KO}{BK} = 0$$

4RST8AB6R8



$N_1 = 0.90787$

$N_2 = 1.45996$

$N_3 = 2.91756$

$R = 0.61896$

Unit. $AB := 1$ Given. $N_1 := .90787$ $N_2 := 1.45996$ $N_3 := 2.91756$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

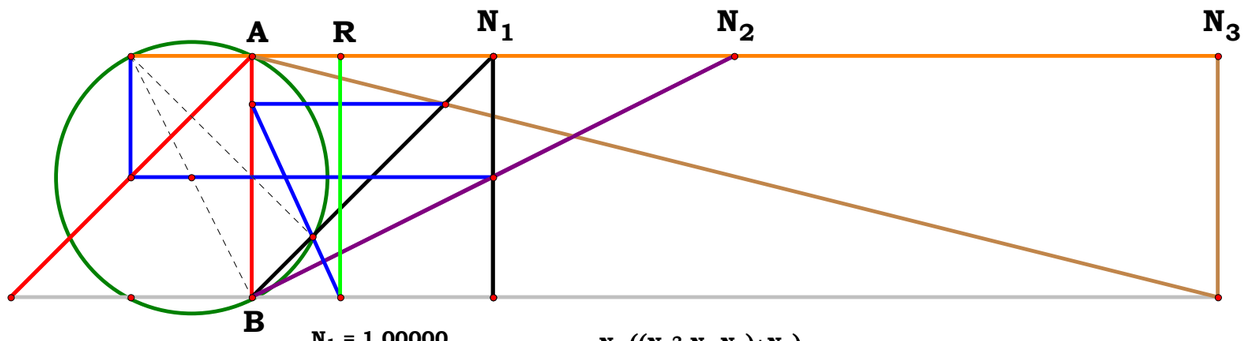
Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BE := \frac{N_3}{N_1 + N_3}$$

$$BN_1 := \sqrt{AB^2 + N_1^2} \qquad FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$$

$$BF := BN_1 - FN_1 \qquad BG := \frac{N_1 \cdot BF}{BN_1}$$

$$FG := \frac{BG}{N_1} \qquad R := \frac{BG \cdot BE}{BE - FG} \qquad R = 0.618963$$



$N_1 = 1.00000$

$N_2 = 2.00000$

$N_3 = 4.00000$

$R = 0.36364$

$$\frac{N_3 \cdot ((N_1^2 - N_1 \cdot N_2) + N_2)}{(N_3 \cdot ((N_2 - N_1) + N_1 \cdot N_2) + N_1 \cdot N_2) - N_1^2 - N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_1^2 - N_1 \cdot N_2 + N_2)}{N_3 \cdot (N_2 - N_1 + N_1 \cdot N_2) + N_1 \cdot N_2 - N_1^2 - N_2} = 0$$

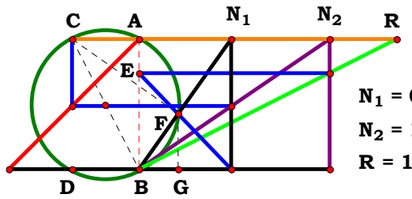
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A^2 - N_u \cdot A + B \cdot N_u)}{A \cdot (N_u^2 - A \cdot C) + N_u \cdot (A + C) \cdot (A - B)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (p \cdot X^2 - Y \cdot X \cdot o + Y \cdot o^2)}{Y \cdot o \cdot (X \cdot Z + X \cdot q + Z \cdot o - o \cdot q) - X \cdot p \cdot (X \cdot q + Z \cdot o)} = 0$$

4RST8AB6R9



$N_1 = 0.70447$
$N_2 = 1.45996$
$R = 1.97774$

Unit. $AB := 1$ Given. $N_1 := .70447$ $N_2 := 1.45996$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $Y := 20$ $Z := 19$ $p := \frac{Y}{N_1}$ $q := \frac{Z}{N_2}$

Descriptions.

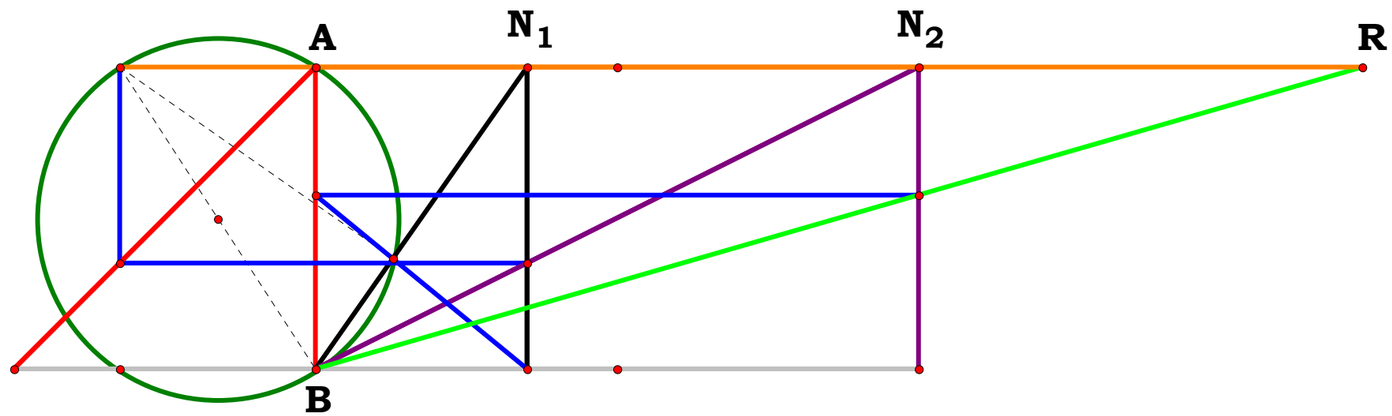
$AC := \frac{N_2 - N_1}{N_2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$

$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$ $BF := BN_1 - FN_1$

$BG := \frac{N_1 \cdot BF}{BN_1}$ $FG := \frac{BG}{N_1}$

$BE := \frac{FG \cdot N_1}{N_1 - BG}$ $R := \frac{N_2}{BE}$

$R = 1.97774$



Definitions.

$$R - \frac{N_1 \cdot N_2 \cdot (N_2 - N_1 + N_1 \cdot N_2)}{N_1^2 - N_1 \cdot N_2 + N_2} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$

$$R - \frac{N_u^2 \cdot (A - B + N_u)}{B \cdot (A^2 - N_u \cdot A + B \cdot N_u)} = 0$$

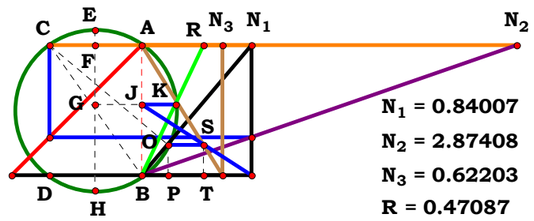
$N_1 - \frac{Y}{p} = 0$ $N_2 - \frac{Z}{q} = 0$

$$R - \frac{Y \cdot Z \cdot (Y \cdot Z - Y \cdot q + Z \cdot p)}{q \cdot (q \cdot Y^2 - Z \cdot Y \cdot p + Z \cdot p^2)} = 0$$

$N_1 = 0.70000$
$N_2 = 2.00000$
$R = 3.46789$

$$\frac{N_1 \cdot N_2 \cdot ((N_2 - N_1) + N_1 \cdot N_2)}{(N_1^2 - N_1 \cdot N_2) + N_2} - R = 0.00000$$

4RST8AB6R10



$N_1 = 0.84007$
$N_2 = 2.87408$
$N_3 = 0.62203$
$R = 0.47087$

Unit. $AB := 1$ Given. $N_1 := .84007$ $N_2 := 2.87408$ $N_3 := .62203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

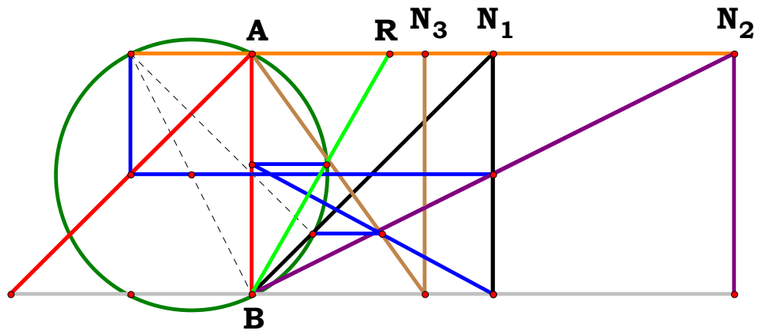
$AC := \frac{N_2 - N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BN_1 := \sqrt{AB^2 + N_1^2}$ $ON_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1}$

$BO := BN_1 - ON_1$ $BP := \frac{N_1 \cdot BO}{BN_1}$ $OP := \frac{BP}{N_1}$

$BT := N_3 \cdot (AB - OP)$ $BJ := \frac{OP \cdot N_1}{N_1 - BT}$ $GH := BJ + EF$

$GK := \sqrt{GH \cdot (EH - GH)}$ $R := \frac{GK - AF}{BJ}$ $R = 0.470865$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 0.71624$
$R = 0.56940$

$$\frac{\sqrt{((N_3^2 \cdot (N_1 - N_2)^2 \cdot ((N_2 - N_1) + N_1 \cdot N_2)^2) + (N_2^2 \cdot ((N_2 - N_1 - N_1^2 \cdot N_2) + N_1^3 + 2 \cdot N_1 \cdot N_2)^2)) - (2 \cdot N_2 \cdot N_3 \cdot ((N_2 - N_1) + N_1 \cdot N_2) \cdot ((N_2^2 \cdot ((N_1^2 - 2 \cdot N_1) + 3) - (2 \cdot N_1 \cdot N_2 \cdot ((N_1^2 - N_1) + 1))) + (N_1^2 \cdot (N_1^2 + 1))))} + (N_1 - N_2) \cdot ((N_2 + N_1^2 \cdot N_2 + N_1 \cdot N_3) - N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3)}{(2 \cdot N_2 \cdot ((N_1^2 - N_1 \cdot N_2) + N_2))} - R = 0.00000$$

Definitions.

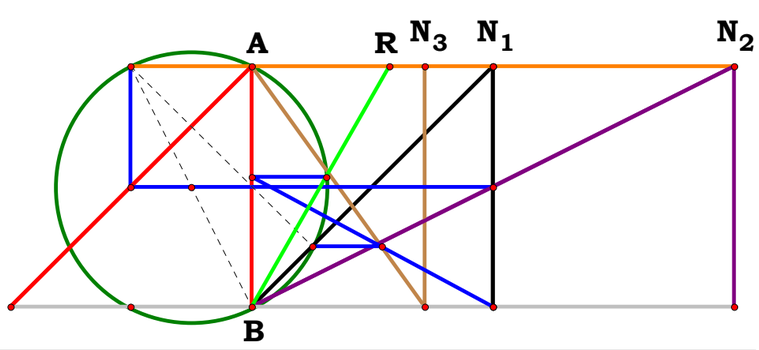
$$R - \frac{\sqrt{\begin{matrix} N_3^2 \cdot (N_1 - N_2)^2 \cdot (N_2 - N_1 + N_1 \cdot N_2)^2 + N_2^2 \cdot (N_2 - N_1 - N_1^2 \cdot N_2 + N_1^3 + 2 \cdot N_1 \cdot N_2)^2 \ \ldots \\ + \ -2 \cdot N_2 \cdot N_3 \cdot (N_2 - N_1 + N_1 \cdot N_2) \cdot [N_2^2 \cdot (N_1^2 - 2 \cdot N_1 + 3) - 2 \cdot N_1 \cdot N_2 \cdot (N_1^2 - N_1 + 1) + N_1^2 \cdot (N_1^2 + 1)] \end{matrix}} + (N_1 - N_2) \cdot (N_2 + N_1^2 \cdot N_2 + N_1 \cdot N_3 - N_2 \cdot N_3 - N_1 \cdot N_2 \cdot N_3)}{2 \cdot N_2 \cdot (N_1^2 - N_1 \cdot N_2 + N_2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{(A - B) \cdot [N_u^2 \cdot (A - C) + N_u \cdot A \cdot (A - B) - A^2 \cdot C] + \sqrt{\begin{matrix} C^2 \cdot [A^2 \cdot (A - B + 2 \cdot N_u) - N_u^2 \cdot (A - B)]^2 + A^2 \cdot N_u^2 \cdot (A - B)^2 \cdot (A - B + N_u)^2 \ \ldots \\ + \ -2 \cdot C \cdot A \cdot N_u \cdot (A - B + N_u) \cdot [N_u^2 \cdot (A - B)^2 - 2 \cdot N_u \cdot A^2 \cdot (A - B) + A^2 \cdot (3 \cdot A^2 - 2 \cdot A \cdot B + B^2)] \end{matrix}}}{2 \cdot A \cdot C \cdot (A^2 - N_u \cdot A + B \cdot N_u)} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\begin{array}{l}\sqrt{\begin{array}{l}Z^2\cdot o^2\cdot (X\cdot Y - X\cdot p + Y\cdot o)^2\cdot (X\cdot p - Y\cdot o)^2 \ \ldots \\ +\ -2\cdot Z\cdot Y\cdot o\cdot q\cdot (X\cdot Y - X\cdot p + Y\cdot o)\cdot \left(\begin{array}{l} X^4\cdot p^2 - 2\cdot X^3\cdot Y\cdot o\cdot p + X^2\cdot Y^2\cdot o^2 \ \ldots \\ +\ 2\cdot X^2\cdot Y\cdot o^2\cdot p + X^2\cdot o^2\cdot p^2 - 2\cdot X\cdot Y^2\cdot o^3 - 2\cdot X\cdot Y\cdot o^3\cdot p + 3\cdot Y^2\cdot o^4 \end{array}\right) \ldots \\ +\ Y^2\cdot q^2\cdot \left(Y\cdot o^3 + X^3\cdot p + 2\cdot X\cdot Y\cdot o^2 - X^2\cdot Y\cdot o - X\cdot o^2\cdot p\right)^2 \end{array}} - Z\cdot o\cdot (X\cdot Y - X\cdot p + Y\cdot o)\cdot (X\cdot p - Y\cdot o) \ \ldots \\ +\ Y\cdot q\cdot \left(X^2 + o^2\right)\cdot (X\cdot p - Y\cdot o)\end{array}}{2\cdot Y\cdot o\cdot q\cdot \left(p\cdot X^2 - Y\cdot X\cdot o + Y\cdot o^2\right)} = 0$$



$N_1 = 1.00000$

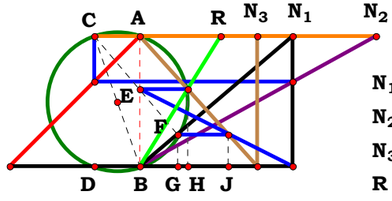
$N_2 = 2.00000$

$N_3 = 0.71624$

$R = 0.56940$

$$\frac{\sqrt{((N_3^2\cdot(N_1-N_2)^2\cdot((N_2-N_1)+N_1\cdot N_2)^2)+(N_2^2\cdot((N_2-N_1-N_1^2\cdot N_2)+N_1^3+2\cdot N_1\cdot N_2)^2))-(2\cdot N_2\cdot N_3\cdot((N_2-N_1)+N_1\cdot N_2)\cdot((N_2^2\cdot((N_1^2-2\cdot N_1)+3)-(2\cdot N_1\cdot N_2\cdot((N_1^2-N_1)+1)))+(N_1^2\cdot(N_1^2+1))))}+(N_1-N_2)\cdot((N_2+N_1^2\cdot N_2+N_1\cdot N_3)-N_2\cdot N_3-N_1\cdot N_2\cdot N_3)}{(2\cdot N_2\cdot((N_1^2-N_1\cdot N_2)+N_2))} - R = 0.00000$$

4RST8AB6R11



$N_1 = 1.16939$
$N_2 = 1.80865$
$N_3 = 0.90291$
$R = 0.62452$

Unit. $AB := 1$ Given. $N_1 := 1.16939$ $N_2 := 1.80865$ $N_3 := .90291$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

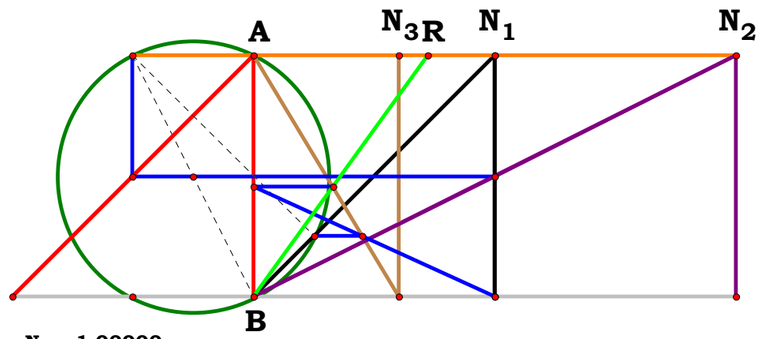
$$AC := \frac{N_2 - N_1}{N_2} \qquad BN_1 := \sqrt{AB^2 + N_1{}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BJ := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BJ}$$

$$BH := N_3 \cdot (AB - BE) \qquad R := \frac{BH}{BE} \qquad R = 0.624537$$



$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$R = 0.72000$

$$\frac{N_3 \cdot (N_1 - N_3) \cdot ((N_2 - N_1) + N_1 \cdot N_2)}{(N_1{}^2 - N_1 \cdot N_2) + N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_3 \cdot (N_1 - N_3) \cdot (N_2 - N_1 + N_1 \cdot N_2)}{N_1{}^2 - N_1 \cdot N_2 + N_2} = 0$$

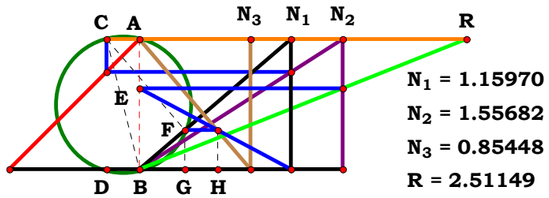
$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u{}^2 \cdot (A - C) \cdot (B - A - N_u)}{C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (X \cdot q - Z \cdot o) \cdot (X \cdot Y - X \cdot p + Y \cdot o)}{q^2 \cdot (p \cdot X^2 - Y \cdot X \cdot o + Y \cdot o^2)} = 0$$

4RST8AB6R12



$N_1 = 1.15970$

$N_2 = 1.55682$

$N_3 = 0.85448$

$R = 2.51149$

Unit. $AB := 1$ **Given.** $N_1 := 1.15970$ $N_2 := 1.55682$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

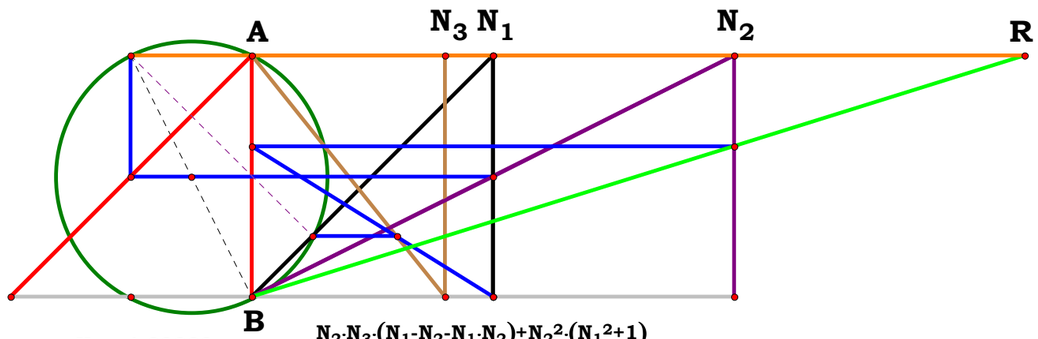
$$AC := \frac{N_2 - N_1}{N_2} \qquad BN_1 := \sqrt{AB^2 + {N_1}^2}$$

$$FN_1 := \frac{N_1 \cdot (N_1 + AC)}{BN_1} \qquad BF := BN_1 - FN_1$$

$$BG := \frac{N_1 \cdot BF}{BN_1} \qquad FG := \frac{BG}{N_1}$$

$$BH := N_3 \cdot (AB - FG) \qquad BE := \frac{FG \cdot N_1}{N_1 - BH}$$

$$R := \frac{N_2}{BE} \qquad R = 2.511501$$



$N_1 = 1.00000$

$N_2 = 2.00000$

$N_3 = 0.80000$

$R = 3.20000$

$$\frac{N_2 \cdot N_3 \cdot (N_1 - N_2 - N_1 \cdot N_2) + {N_2}^2 \cdot ({N_1}^2 + 1)}{({N_1}^2 - N_1 \cdot N_2) + N_2} - R = 0.00000$$

Definitions.

$$R - \frac{N_2 \cdot N_3 \cdot (N_1 - N_2 - N_1 \cdot N_2) + {N_2}^2 \cdot ({N_1}^2 + 1)}{{N_1}^2 - N_1 \cdot N_2 + N_2} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \qquad N_2 - \frac{N_u}{B} = 0 \qquad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C \cdot N_u \cdot (A^2 + {N_u}^2) - A \cdot {N_u}^2 \cdot (A - B + N_u)}{B \cdot C \cdot \left[A^2 - N_u \cdot (A - B)\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \qquad N_2 - \frac{Y}{p} = 0 \qquad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Y^2 \cdot q \cdot (X^2 + o^2) - Y \cdot Z \cdot o \cdot (X \cdot Y - X \cdot p + Y \cdot o)}{p \cdot q \cdot (p \cdot X^2 - Y \cdot X \cdot o + Y \cdot o^2)} = 0$$

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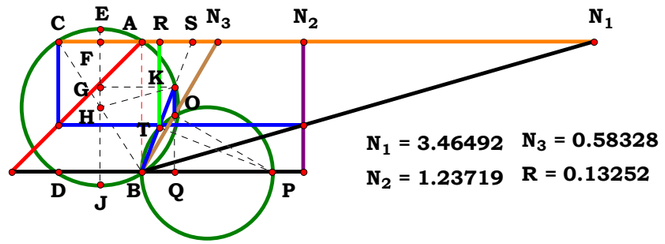


Unit. $AB := 1$ Given. $N_1 := 3.46492$ $N_2 := 1.23719$ $N_3 := .58328$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

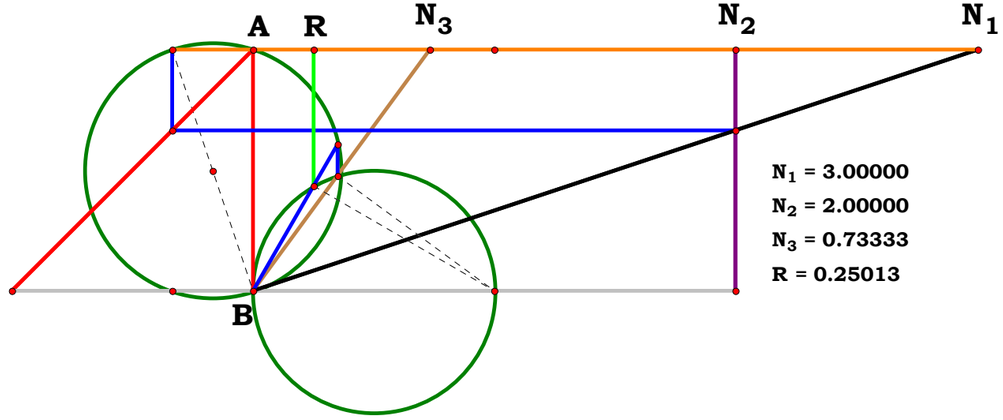
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $AS := \frac{GK - AF}{AB - FG}$

$R := \frac{AS^2}{AS^2 + 1}$ $R = 0.132516$



$$\frac{(2 \cdot N_1 \cdot N_3^4)}{(N_3^2+1) \cdot ((N_1-(N_1 \cdot N_3^2))+(2 \cdot N_2 \cdot N_3^2)+\sqrt{N_1} \cdot \sqrt{(N_1-2 \cdot N_3^2 \cdot (N_1-2 \cdot N_2))+N_3^4 \cdot (4 \cdot N_2-7 \cdot N_1)})} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_3^4 \cdot \sqrt{\left(N_3^2+1\right)^2}}{\left(N_3^2+1\right) \cdot \left[\sqrt{N_3^4+2 \cdot N_3^2+1} \cdot \left(N_3^2-2 \cdot AC \cdot N_3^2+1\right)+\sqrt{2 \cdot N_3^2-3 \cdot N_3^4-4 \cdot AC \cdot N_3^2-4 \cdot AC \cdot N_3^4+1} \cdot \left(N_3^2+1\right)\right]} = 0$$

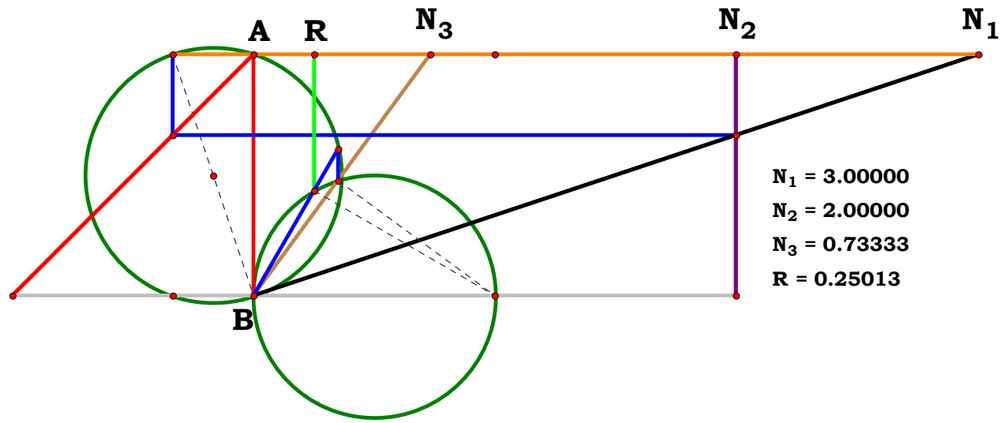
$$R - \frac{2 \cdot N_1 \cdot N_3^4}{\left(N_3^2+1\right) \cdot \left[N_1-N_1 \cdot N_3^2+2 \cdot N_2 \cdot N_3^2+\sqrt{N_1} \cdot \sqrt{N_1-2 \cdot N_3^2 \cdot \left(N_1-2 \cdot N_2\right)+N_3^4 \cdot \left(4 \cdot N_2-7 \cdot N_1\right)}\right]} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot B \cdot \left(\sqrt{N_u}\right)^9 \cdot \sqrt{A \cdot B}}{\left(C^2+N_u^2\right) \cdot \left[\sqrt{N_u} \cdot \sqrt{A \cdot B} \cdot \left(B \cdot C^2+2 \cdot A \cdot N_u^2-B \cdot N_u^2\right)+\sqrt{A} \cdot B \cdot \sqrt{N_u^5 \cdot (4 \cdot A-7 \cdot B)+B \cdot C^4 \cdot N_u-2 \cdot C^2 \cdot N_u^3 \cdot (B-2 \cdot A)}\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0 \qquad R = 0.132516$$

$$R - \frac{2 \cdot X \cdot Z^4 \cdot p \cdot \sqrt{o \cdot p}}{\left(Z^2 + q^2\right) \cdot \left[\sqrt{X} \cdot \sqrt{o} \cdot p \cdot \sqrt{4 \cdot Y \cdot Z^2 \cdot o \cdot \left(Z^2 + q^2\right) - X \cdot p \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)} - \sqrt{o \cdot p} \cdot \left(X \cdot Z^2 \cdot p - 2 \cdot Y \cdot Z^2 \cdot o - X \cdot p \cdot q^2\right)\right]} = 0$$



$$\frac{\left(2 \cdot N_1 \cdot N_3^4\right)}{\left(N_3^2+1\right) \cdot \left(\left(N_1-\left(N_1 \cdot N_3^2\right)\right)+\left(2 \cdot N_2 \cdot N_3^2\right)+\sqrt{N_1} \cdot \sqrt{\left(N_1-2 \cdot N_3^2 \cdot \left(N_1-2 \cdot N_2\right)\right)+N_3^4 \cdot \left(4 \cdot N_2-7 \cdot N_1\right)}\right)} - R = 0.00000$$

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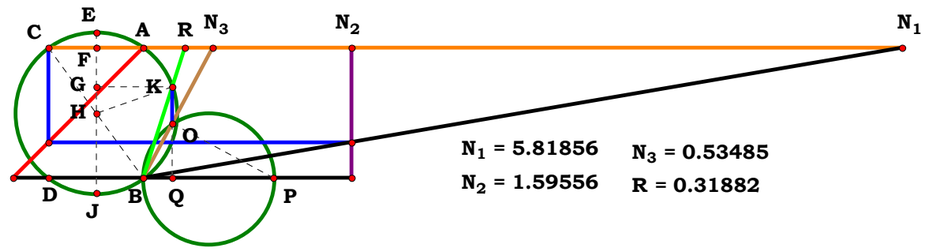


Unit. $AB := 1$ Given. $N_1 := 5.81856$ $N_2 := 1.59556$ $N_3 := .53485$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

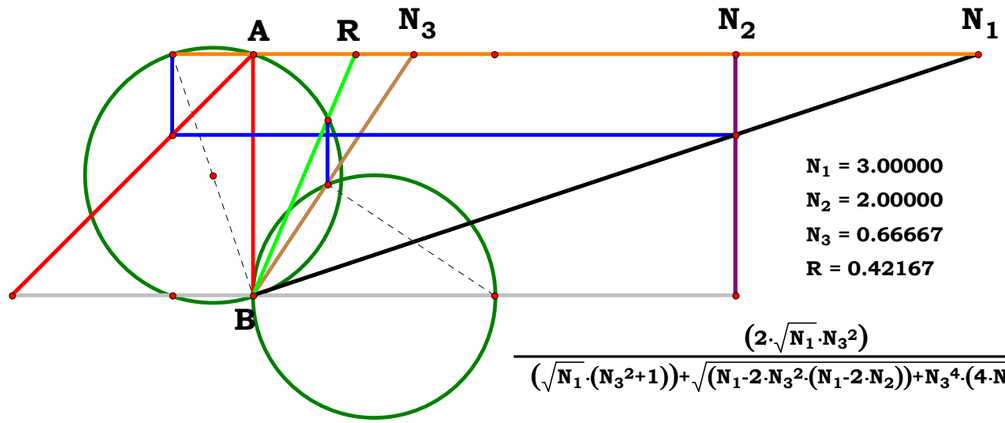
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $R := \frac{GK - AF}{AB - FG}$

$R = 0.318811$



$\frac{(2 \cdot \sqrt{N_1} \cdot N_3^2)}{(\sqrt{N_1} \cdot (N_3^2+1)) + \sqrt{(N_1 - 2 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2)) + N_3^4 \cdot (4 \cdot N_2 - 7 \cdot N_1)}} - R = 0.00000$

Definitions.

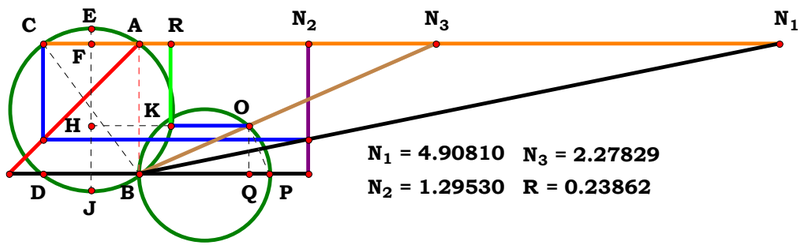
$$R - \frac{2 \cdot N_3^2 \cdot \sqrt{\left(N_3^2 + 1\right)^2}}{\left(N_3^2 + 1\right) \cdot \left[\sqrt{\left(N_3^2 + 1\right)^2} + \sqrt{2 \cdot N_3^2 - 3 \cdot N_3^4 - 4 \cdot AC \cdot N_3^2 - 4 \cdot AC \cdot N_3^4 + 1}\right]} = 0$$

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_3^2}{\sqrt{N_1} \cdot \left(N_3^2 + 1\right) + \sqrt{N_1 - 2 \cdot N_3^2 \cdot \left(N_1 - 2 \cdot N_2\right) + N_3^4 \cdot \left(4 \cdot N_2 - 7 \cdot N_1\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot \left(C^2 + N_u^2\right) + \sqrt{A} \cdot \sqrt{N_u^5 \cdot (4 \cdot A - 7 \cdot B) + B \cdot C^4 \cdot N_u - 2 \cdot C^2 \cdot N_u^3 \cdot (B - 2 \cdot A)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot \sqrt{X} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{o} \cdot \sqrt{4 \cdot Y \cdot Z^2 \cdot o \cdot \left(Z^2 + q^2\right) - X \cdot p \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)} + \sqrt{o \cdot p} \cdot \sqrt{X} \cdot \left(Z^2 + q^2\right)} = 0$$

4RST10AAB1R2



$N_1 = 4.90810 \quad N_3 = 2.27829$

$N_2 = 1.29530 \quad R = 0.23862$

Unit. $AB := 1$ **Given.** $N_1 := 4.90810 \quad N_2 := 1.29530 \quad N_3 := 2.27829$

$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3}$

$X := 20 \quad Y := 19 \quad Z := 18 \quad o := \frac{X}{N_1} \quad p := \frac{Y}{N_2} \quad q := \frac{Z}{N_3}$

Descriptions.

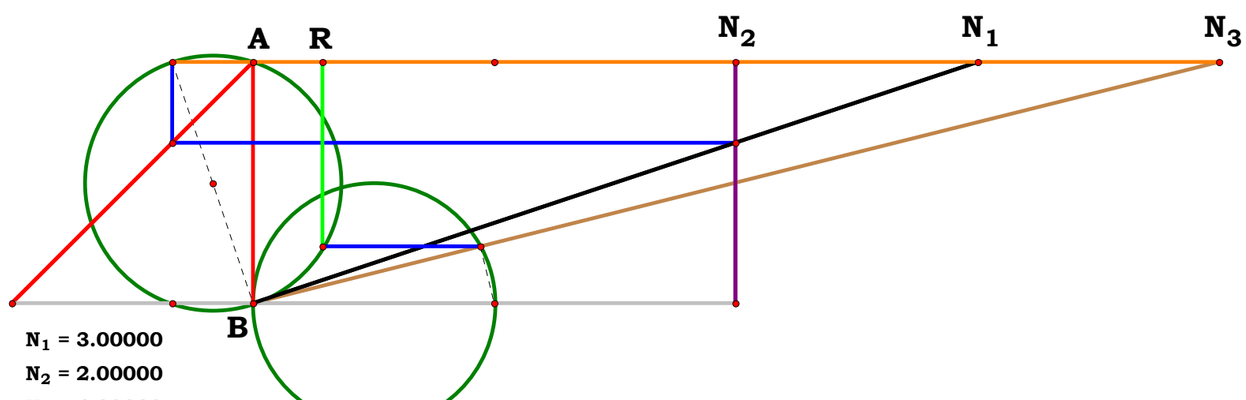
$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1} \qquad HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := HK - AF$

$R = 0.238618$



$N_1 = 3.00000$

$N_2 = 2.00000$

$N_3 = 4.00000$

$R = 0.28908$

$\frac{\sqrt{(N_3^4 \cdot (N_1 - N_2)^2 + 4 \cdot N_1^2 \cdot N_3 \cdot (N_3^2 + 1)) - N_2 \cdot (2 \cdot N_3^2 + 1) \cdot (2 \cdot N_1 - N_2) - N_1^2 \cdot (2 \cdot N_3^2 - 1)} - (N_3^2 + 1) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot (N_3^2 + 1)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{AC^2 \cdot N_3^4 + 2 \cdot AC^2 \cdot N_3^2 + AC^2 + 4 \cdot N_3^3 - 4 \cdot N_3^2 + 4 \cdot N_3} - AC \cdot \sqrt{N_3^4 + 2 \cdot N_3^2 + 1}}{2 \cdot \sqrt{N_3^4 + 2 \cdot N_3^2 + 1}} = 0$$

$$R - \frac{\sqrt{N_3^4 \cdot (N_1 - N_2)^2 + 4 \cdot N_1^2 \cdot N_3 \cdot (N_3^2 + 1) - N_2 \cdot (2 \cdot N_3^2 + 1) \cdot (2 \cdot N_1 - N_2) - N_1^2 \cdot (2 \cdot N_3^2 - 1)} - (N_3^2 + 1) \cdot (N_1 - N_2)}{2 \cdot N_1 \cdot (N_3^2 + 1)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2 \cdot (C^4 + 4 \cdot C^3 \cdot N_u - 2 \cdot C^2 \cdot N_u^2 + 4 \cdot C \cdot N_u^3 + N_u^4) + A \cdot (C^2 + N_u^2)^2 \cdot (A - 2 \cdot B) + (C^2 + N_u^2) \cdot (A - B)}}{2 \cdot B \cdot (C^2 + N_u^2)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y \cdot o \cdot (Z^2 + q^2)^2 \cdot (Y \cdot o - 2 \cdot X \cdot p) + X^2 \cdot p^2 \cdot (Z^4 + 4 \cdot Z^3 \cdot q - 2 \cdot Z^2 \cdot q^2 + 4 \cdot Z \cdot q^3 + q^4)} - (Z^2 + q^2) \cdot (X \cdot p - Y \cdot o)}{2 \cdot X \cdot p \cdot (Z^2 + q^2)} = 0$$

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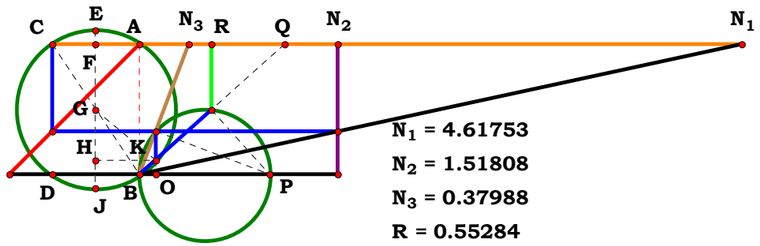


Unit. $AB := 1$ Given. $N_1 := 4.61753$ $N_2 := 1.51808$ $N_3 := .37988$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

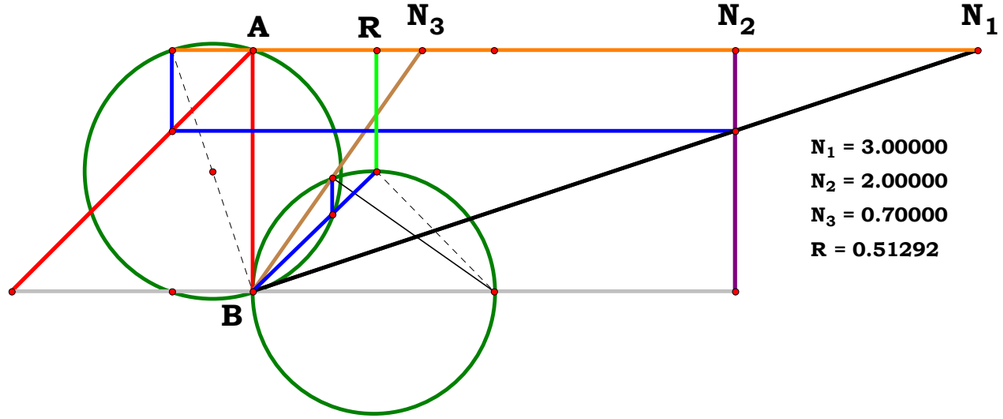
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BO := \frac{N_3^2}{N_3^2 + 1}$ $GK := \frac{EJ}{2}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $AQ := \frac{BO}{KO}$

$R := \frac{AQ^2}{AQ^2 + 1}$ $R = 0.552845$



$\frac{(2 \cdot N_1 \cdot N_3^4)}{(N_3^2+1) \cdot (((N_1 - N_1 \cdot N_3^2) + 2 \cdot N_2 \cdot N_3^2) - \sqrt{(N_1 \cdot N_3^4 \cdot (4 \cdot N_2 - 7 \cdot N_1) - 2 \cdot N_1 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2)) + N_1^2})} - R = 0.00000$

Definitions.

$$R - \frac{4 \cdot N_3^4}{2 \cdot \left(N_3^2 + 1\right) \cdot \left(N_3^2 - 2 \cdot AC \cdot N_3^2 + 1\right) - 2 \cdot \sqrt{\left(N_3^2 + 1\right)^2} \cdot \sqrt{2 \cdot N_3^2 - 3 \cdot N_3^4 - 4 \cdot AC \cdot N_3^2 - 4 \cdot AC \cdot N_3^4 + 1}} = 0$$

$$R - \frac{2 \cdot N_1 \cdot N_3^4}{\left(N_3^2 + 1\right) \cdot \left[N_1 - N_1 \cdot N_3^2 + 2 \cdot N_2 \cdot N_3^2 - \sqrt{N_1 \cdot N_3^4 \cdot \left(4 \cdot N_2 - 7 \cdot N_1\right) - 2 \cdot N_1 \cdot N_3^2 \cdot \left(N_1 - 2 \cdot N_2\right) + N_1^2}\right]} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{B}\right)^2 \cdot N_u^4}{\left(C^2 + N_u^2\right) \cdot \left[B \cdot C^2 - \sqrt{B} \cdot \sqrt{N_u^4 \cdot (4 \cdot A - 7 \cdot B) + B \cdot C^4 - 2 \cdot C^2 \cdot N_u^2 \cdot (B - 2 \cdot A)} + N_u^2 \cdot (2 \cdot A - B)\right]} = 0$$

$$R - \frac{2 \cdot X \cdot Z^4 \cdot p}{\left(Z^2 + q^2\right) \cdot \left[2 \cdot Y \cdot Z^2 \cdot o - X \cdot Z^2 \cdot p + X \cdot p \cdot q^2 - \sqrt{p} \cdot \sqrt{4 \cdot Y \cdot X \cdot Z^2 \cdot o \cdot \left(Z^2 + q^2\right) - X^2 \cdot p \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)}\right]} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

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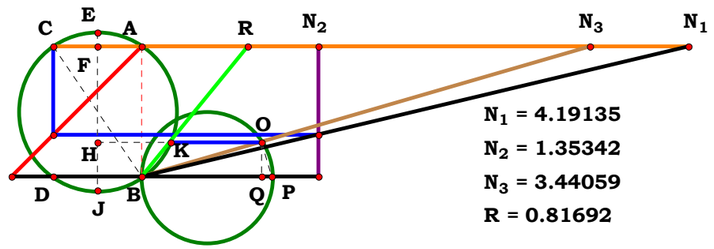


Unit. $AB := 1$ Given. $N_1 := 4.19135$ $N_2 := 1.35342$ $N_3 := 3.44059$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

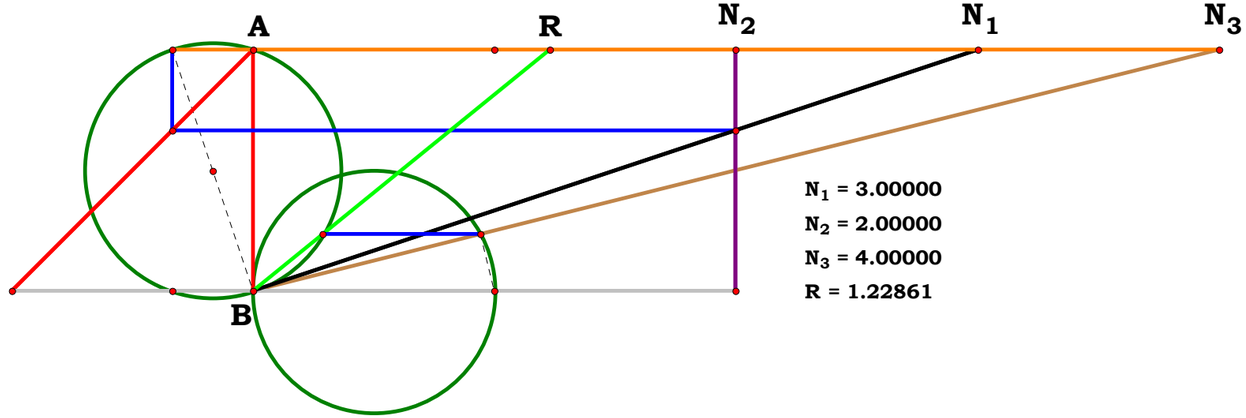
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.816925$



Definitions.

$$\frac{\sqrt{((((N_3^4 \cdot (N_1-N_2)^2+4 \cdot N_1^2 \cdot N_3 \cdot (N_3^2+1))-2 \cdot N_3^2 \cdot ((N_1^2+2 \cdot N_1 \cdot N_2)-N_2^2))+N_1^2)-2 \cdot N_1 \cdot N_2)+N_2^2} \cdot (N_3^2+1) \cdot (N_1-N_2)}{2 \cdot N_1 \cdot N_3} - R = 0.00000$$

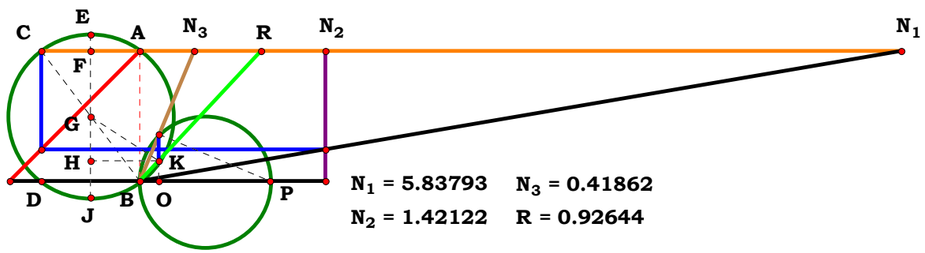
$$R - \frac{\left(N_3^2+1\right) \cdot \left[\sqrt{AC^2 \cdot \left(N_3^2+1\right)^2 + 4 \cdot N_3 \cdot \left(N_3^2 - N_3 + 1\right)} - AC \cdot \sqrt{\left(N_3^2+1\right)^2}\right]}{2 \cdot N_3 \cdot \sqrt{\left(N_3^2+1\right)^2}} = 0$$

$$R - \frac{\sqrt{N_3^4 \cdot \left(N_1 - N_2\right)^2 + 4 \cdot N_1^2 \cdot N_3 \cdot \left(N_3^2+1\right) - 2 \cdot N_3^2 \cdot \left(N_1^2 + 2 \cdot N_1 \cdot N_2 - N_2^2\right) + N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2} - \left(N_3^2+1\right) \cdot \left(N_1 - N_2\right)}{2 \cdot N_1 \cdot N_3} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2 \cdot \left(C^4 + 4 \cdot C^3 \cdot N_u - 2 \cdot C^2 \cdot N_u^2 + 4 \cdot C \cdot N_u^3 + N_u^4\right) + A \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - 2 \cdot B)} + \left(C^2 + N_u^2\right) \cdot (A - B)}{2 \cdot N_u \cdot B \cdot C} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{(Y \cdot o - X \cdot p) \cdot \left(Z^2 + q^2\right) + \sqrt{Y \cdot o \cdot \left(Z^2 + q^2\right)^2 \cdot (Y \cdot o - 2 \cdot X \cdot p) + X^2 \cdot p^2 \cdot \left(Z^4 + 4 \cdot Z^3 \cdot q - 2 \cdot Z^2 \cdot q^2 + 4 \cdot Z \cdot q^3 + q^4\right)}}{2 \cdot X \cdot Z \cdot p \cdot q} = 0$$

4RST10AAB1R5



$N_1 = 5.83793$ $N_3 = 0.41862$
$N_2 = 1.42122$ $R = 0.92644$

Unit. $AB := 1$ **Given.** $N_1 := 5.8379$ $N_2 := 1.42122$ $N_3 := .41862$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

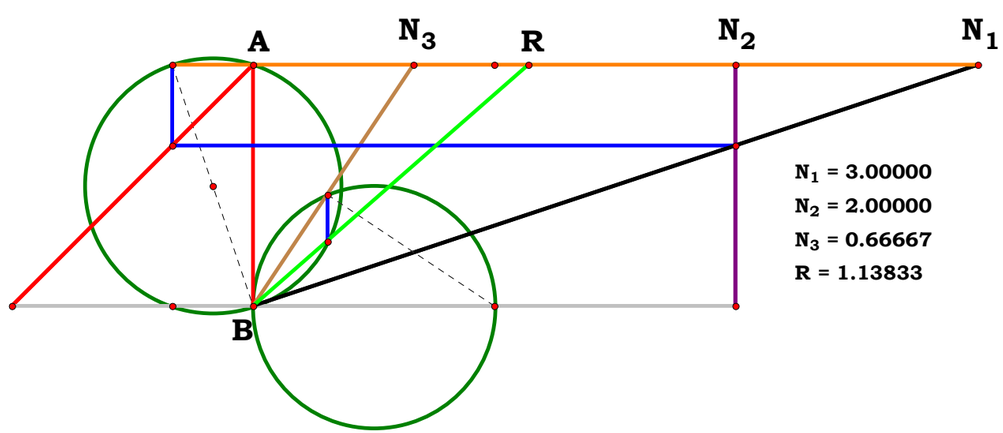
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $BO := \frac{N_3^2}{N_3^2 + 1}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $R := \frac{BO}{KO}$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.66667$
$R = 1.13833$

$R = 0.926446$

$$\frac{(2 \cdot N_3^2 \cdot \sqrt{N_1})}{(\sqrt{N_1} \cdot (N_3^2+1)) - \sqrt{(N_1 - 2 \cdot N_3^2 \cdot (N_1 - 2 \cdot N_2)) + N_3^4 \cdot (4 \cdot N_2 - 7 \cdot N_1)}} - R = 0.00000$$

Definitions.

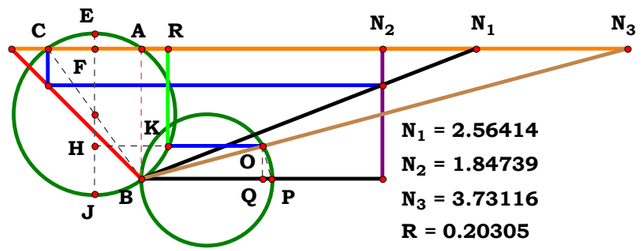
$$R - \frac{2 \cdot N_3^2 \cdot \sqrt{\left(N_3^2 + 1\right)^2}}{\left(N_3^2 + 1\right) \cdot \left[\sqrt{\left(N_3^2 + 1\right)^2} - \sqrt{2 \cdot N_3^2 - 4 \cdot AC \cdot N_3^2 \cdot \left(N_3^2 + 1\right) - 3 \cdot N_3^4 + 1}\right]} = 0$$

$$R - \frac{2 \cdot \sqrt{N_1} \cdot N_3^2}{\sqrt{N_1} \cdot \left(N_3^2 + 1\right) - \sqrt{N_1 - 2 \cdot N_3^2 \cdot \left(N_1 - 2 \cdot N_2\right) + N_3^4 \cdot \left(4 \cdot N_2 - 7 \cdot N_1\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot \left(C^2 + N_u^2\right) - \sqrt{A} \cdot \sqrt{N_u \cdot \left[N_u^4 \cdot (4 \cdot A - 7 \cdot B) + B \cdot C^4 - 2 \cdot C^2 \cdot N_u^2 \cdot (B - 2 \cdot A)\right]}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot \sqrt{X} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{o \cdot p} \cdot \sqrt{X} \cdot \left(Z^2 + q^2\right) - \sqrt{o} \cdot \sqrt{4 \cdot Y \cdot Z^2 \cdot o \cdot \left(Z^2 + q^2\right) - X \cdot p \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)}} = 0$$

4RST10AAB2R2



Unit. $AB := 1$ Given. $N_1 := 2.56414$ $N_2 := 1.84739$ $N_3 := 3.73116$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

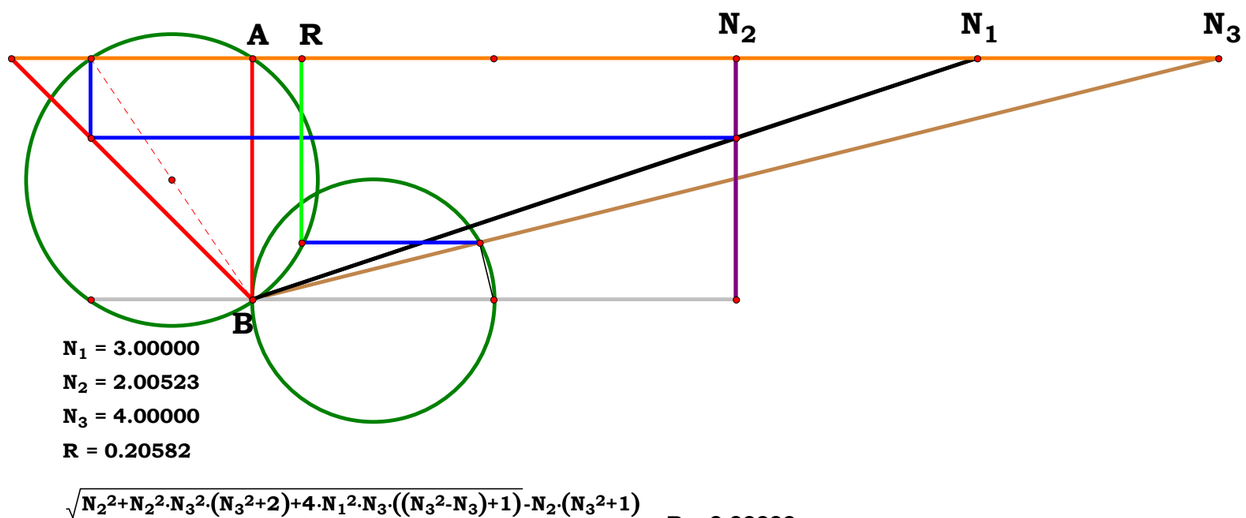
$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := HK - AF$

$R = 0.203054$



$$\frac{\sqrt{N_2^2+N_2^2\cdot N_3^2\cdot(N_3^2+2)+4\cdot N_1^2\cdot N_3\cdot((N_3^2-N_3)+1)}-N_2\cdot(N_3^2+1)}{2\cdot N_1\cdot(N_3^2+1)}-R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_2^2 + N_2^2 \cdot N_3^2 \cdot \left(N_3^2 + 2\right) + 4 \cdot N_1^2 \cdot N_3 \cdot \left(N_3^2 - N_3 + 1\right)} - N_2 \cdot \left(N_3^2 + 1\right)}{2 \cdot N_1 \cdot \left(N_3^2 + 1\right)} = 0$$

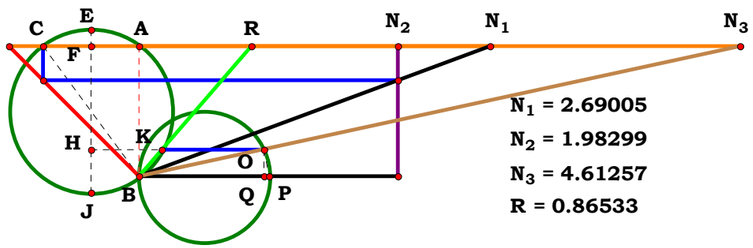
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{A^2 \cdot \left(C^2 + N_u^2\right)^2 + 4 \cdot B^2 \cdot C \cdot N_u \cdot \left(C^2 - C \cdot N_u + N_u^2\right)} - A \cdot \left(C^2 + N_u^2\right)}{2 \cdot B \cdot \left(C^2 + N_u^2\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y^2 \cdot o^2 \cdot \left(Z^2 + q^2\right)^2 + 4 \cdot X^2 \cdot Z \cdot p^2 \cdot q \cdot \left(Z^2 - Z \cdot q + q^2\right)} - Y \cdot o \cdot \left(Z^2 + q^2\right)}{2 \cdot X \cdot p \cdot \left(Z^2 + q^2\right)} = 0$$

4RST10AAB2R4



$N_1 = 2.69005$
$N_2 = 1.98299$
$N_3 = 4.61257$
$R = 0.86533$

Unit. $AB := 1$ **Given.** $N_1 := 2.69005$ $N_2 := 1.98299$ $N_3 := 4.61257$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

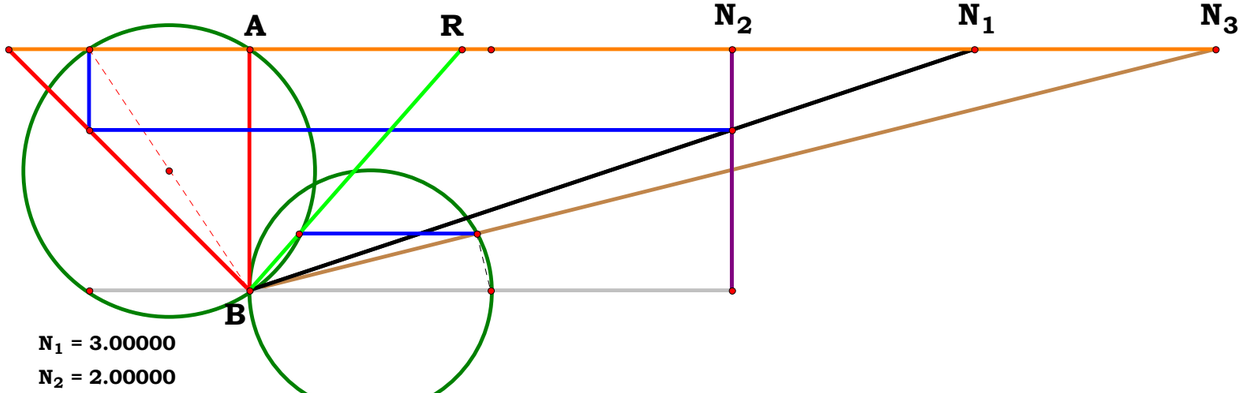
$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.865329$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$R = 0.87614$

$\frac{\sqrt{((N_2^2 \cdot N_3^4 + 4 \cdot N_1^2 \cdot N_3 \cdot (N_3^2+1)) - 2 \cdot N_3^2 \cdot (2 \cdot N_1^2 - N_2^2)) + N_2^2} - N_2 \cdot (N_3^2+1)}{2 \cdot N_1 \cdot N_3} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_2^2 \cdot N_3^4 + 4 \cdot N_1^2 \cdot N_3 \cdot \left(N_3^2 + 1\right) - 2 \cdot N_3^2 \cdot \left(2 \cdot N_1^2 - N_2^2\right) + N_2^2} - N_2 \cdot \left(N_3^2 + 1\right)}{2 \cdot N_1 \cdot N_3} = 0$$

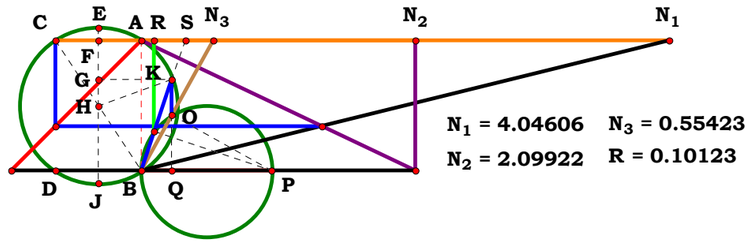
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{A^2 \cdot \left(C^2 + N_u^2\right)^2 + 4 \cdot B^2 \cdot C \cdot N_u \cdot \left(C^2 - C \cdot N_u + N_u^2\right)} - A \cdot \left(C^2 + N_u^2\right)}{2 \cdot N_u \cdot B \cdot C} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y^2 \cdot o^2 \cdot \left(Z^2 + q^2\right)^2 + 4 \cdot X^2 \cdot Z \cdot p^2 \cdot q \cdot \left(Z^2 - Z \cdot q + q^2\right)} - Y \cdot o \cdot \left(Z^2 + q^2\right)}{2 \cdot X \cdot Z \cdot p \cdot q} = 0$$

4RST10AAB3R0



Unit. $AB := 1$ Given. $N_1 := 4.04606$ $N_2 := 2.09922$ $N_3 := .55423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

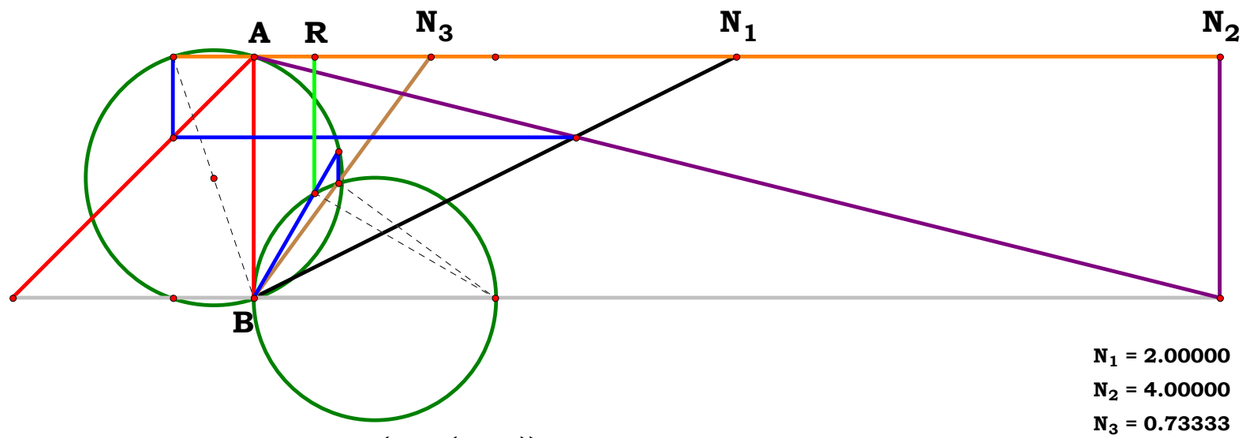
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $AS := \frac{GK - AF}{AB - FG}$

$R := \frac{AS^2}{AS^2 + 1}$ $R = 0.101239$



$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 0.73333$
$R = 0.25013$

$$\frac{(2 \cdot N_3^4 \cdot (N_1 + N_2))}{(N_3^2+1) \cdot (((N_1+N_2) - N_3^2 \cdot (N_1 - N_2)) + \sqrt{(N_1+N_2) - 2 \cdot N_3^2 \cdot (N_1 - N_2) - N_3^4 \cdot (7 \cdot N_1 + 3 \cdot N_2)} \cdot \sqrt{(N_1+N_2)})} - R = 0.00000$$

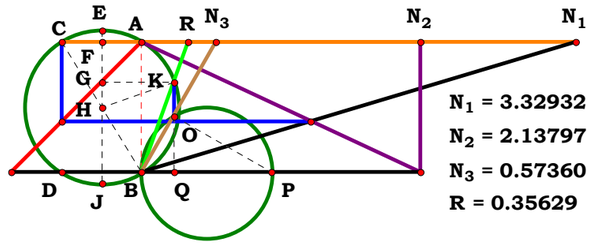
Definitions.

$$R - \frac{2 \cdot N_3^4 \cdot (N_1 + N_2)}{(N_3^2 + 1) \cdot \left[N_1 + N_2 - N_3^2 \cdot (N_1 - N_2) + \sqrt{N_1 + N_2 - 2 \cdot N_3^2 \cdot (N_1 - N_2) - N_3^4 \cdot (7 \cdot N_1 + 3 \cdot N_2)} \cdot \sqrt{N_1 + N_2}\right]} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot N_u^5 \cdot (\sqrt{A \cdot B})^2 \cdot (A + B)}{(C^2 + N_u^2) \cdot \left[A \cdot B \cdot N_u \cdot \left[C^2 \cdot (A + B) + N_u^2 \cdot (A - B)\right] + A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A + B) - N_u^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - B)\right]} \cdot \sqrt{N_u \cdot (A + B)}\right]} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Z^4 \cdot (X \cdot p + Y \cdot o)}{(Z^2 + q^2) \cdot \left[\sqrt{X \cdot p + Y \cdot o} \cdot \sqrt{Y \cdot o \cdot (2 \cdot Z^2 \cdot q^2 - 3 \cdot Z^4 + q^4) - X \cdot p \cdot (7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4)} - Z^2 \cdot (X \cdot p - Y \cdot o) + q^2 \cdot (X \cdot p + Y \cdot o)\right]} = 0$$

4RST10AAB3R1



Unit. $AB := 1$ Given. $N_1 := 3.32932$ $N_2 := 2.13797$ $N_3 := .57360$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

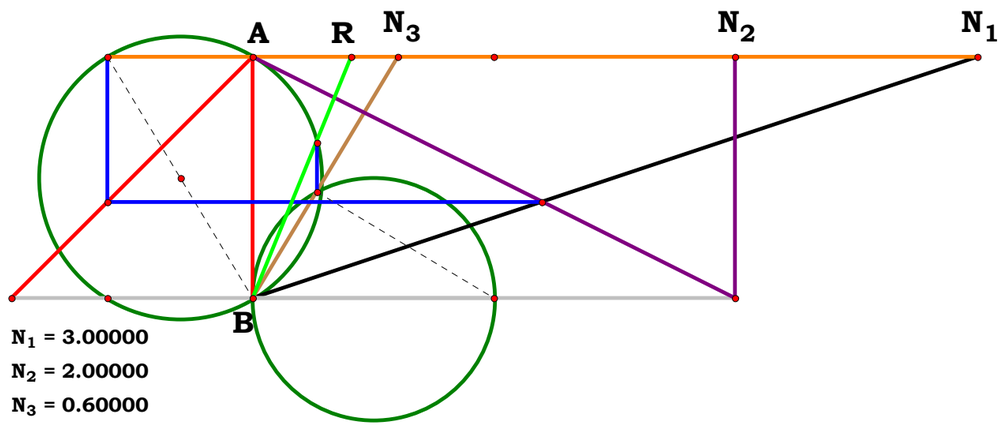
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $R := \frac{GK - AF}{AB - FG}$

$R = 0.356297$



$$\frac{\left(2 \cdot N_3^2 \cdot \sqrt{(N_1+N_2)}\right)}{\sqrt{(N_1+N_2)-N_3^4 \cdot (7 \cdot N_1+3 \cdot N_2)-2 \cdot N_3^2 \cdot (N_1-N_2)}+\left(N_3^2+1\right) \cdot \sqrt{(N_1+N_2)}} - R = 0.00000$$

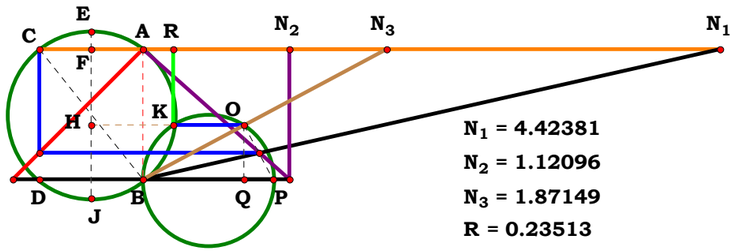
Definitions.

$$R - \frac{2 \cdot N_3^2 \cdot \sqrt{N_1 + N_2}}{\sqrt{N_1 + N_2 - N_3^4 \cdot (7 \cdot N_1 + 3 \cdot N_2) - 2 \cdot N_3^2 \cdot (N_1 - N_2)} + \sqrt{N_1 + N_2} \cdot \left(N_3^2 + 1\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot N_u^2 \cdot \sqrt{N_u \cdot (A + B)}}{\sqrt{N_u \cdot \left[C^4 \cdot (A + B) - N_u^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - B)\right]} + \sqrt{N_u \cdot (A + B)} \cdot \left(C^2 + N_u^2\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Z^2 \cdot \sqrt{X \cdot p + Y \cdot o}}{\sqrt{X \cdot p + Y \cdot o} \cdot \left(Z^2 + q^2\right) + \sqrt{Y \cdot o \cdot \left(2 \cdot Z^2 \cdot q^2 - 3 \cdot Z^4 + q^4\right) - X \cdot p \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)}} = 0$$

4RST10AAB3R2



$N_1 = 4.42381$
$N_2 = 1.12096$
$N_3 = 1.87149$
$R = 0.23513$

Unit. $AB := 1$ Given. $N_1 := 4.42381$ $N_2 := 1.12096$ $N_3 := 1.87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

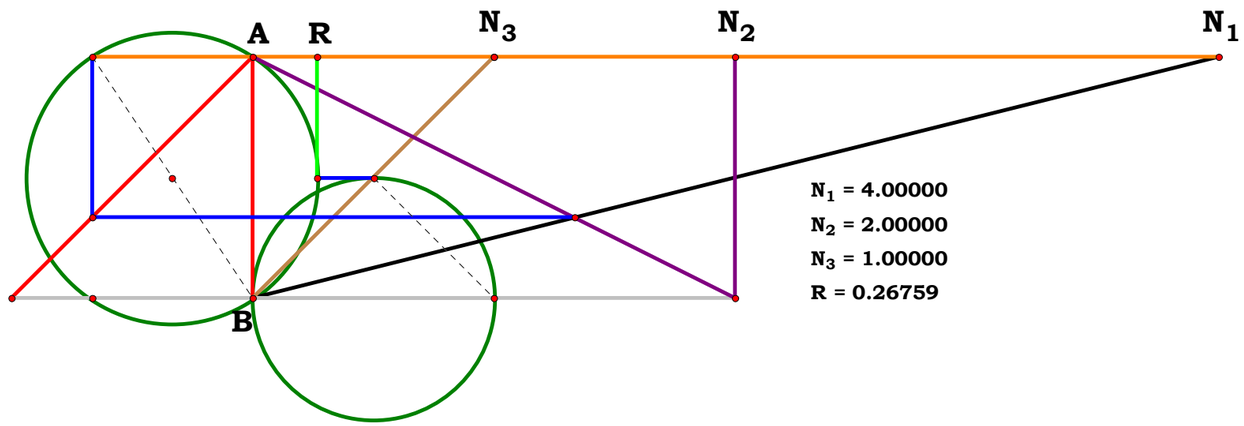
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := HK - AF$

$R = 0.235134$



$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.26759$

$$\frac{\sqrt{(N_1^2-2\cdot N_3^2\cdot(N_1^2+4\cdot N_1\cdot N_2+2\cdot N_2^2))+N_1^2\cdot N_3^4+4\cdot N_3\cdot(N_1+N_2)^2\cdot(N_3^2+1)}-N_1\cdot(N_3^2+1)}{2\cdot(N_3^2+1)\cdot(N_1+N_2)}-R = 0.00000$$

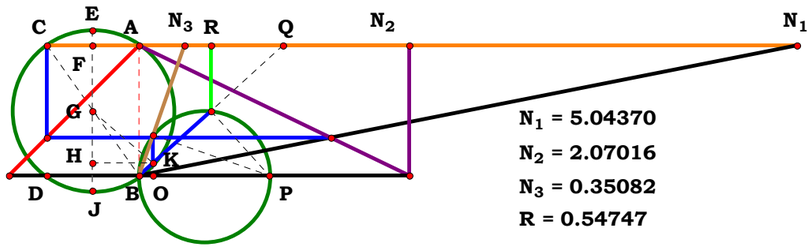
Definitions.

$$R - \frac{\sqrt{N_1^2 - 2\cdot N_3^2\cdot\left(N_1^2 + 4\cdot N_1\cdot N_2 + 2\cdot N_2^2\right) + N_1^2\cdot N_3^4 + 4\cdot N_3\cdot\left(N_1 + N_2\right)^2\cdot\left(N_3^2 + 1\right)} - N_1\cdot\left(N_3^2 + 1\right)}{2\cdot\left(N_3^2 + 1\right)\cdot\left(N_1 + N_2\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2\cdot C^4 + B^2\cdot N_u^4 + 4\cdot C\cdot N_u^3\cdot(A+B)^2 + 4\cdot C^3\cdot N_u\cdot(A+B)^2 - 2\cdot C^2\cdot N_u^2\cdot\left(2\cdot A^2 + 4\cdot A\cdot B + B^2\right)} - B\cdot\left(C^2 + N_u^2\right)}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{X^2\cdot p^2\cdot\left(Z^4 + 4\cdot Z^3\cdot q - 2\cdot Z^2\cdot q^2 + 4\cdot Z\cdot q^3 + q^4\right) + 4\cdot Y\cdot Z\cdot o\cdot q\cdot\left(Z^2 - Z\cdot q + q^2\right)\cdot(2\cdot X\cdot p + Y\cdot o)} - X\cdot p\cdot\left(Z^2 + q^2\right)}{(2\cdot X\cdot p + 2\cdot Y\cdot o)\cdot\left(Z^2 + q^2\right)} = 0$$

4RST10AAB3R3



$N_1 = 5.04370$
$N_2 = 2.07016$
$N_3 = 0.35082$
$R = 0.54747$

Unit. $AB := 1$ **Given.** $N_1 := 5.04370$ $N_2 := 2.07016$ $N_3 := .35082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

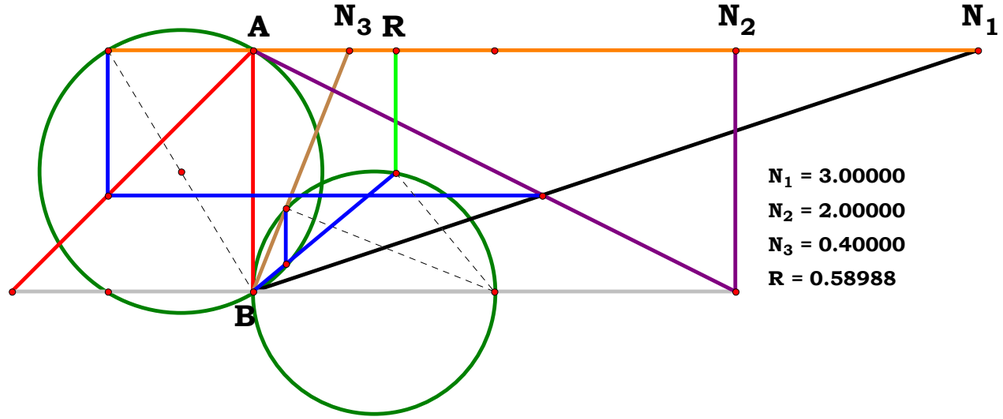
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BO := \frac{N_3^2}{N_3^2 + 1}$ $GK := \frac{EJ}{2}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $AQ := \frac{BO}{KO}$

$R := \frac{AQ^2}{AQ^2 + 1}$ $R = 0.54747$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.40000$
$R = 0.58988$

$$\frac{(2 \cdot N_3^4 \cdot (N_1 + N_2))}{(N_3^2 + 1) \cdot (((N_1 + N_2) - N_3^2 \cdot (N_1 - N_2)) - \sqrt{(N_1 + N_2) \cdot ((N_1 + N_2) - 2 \cdot N_3^2 \cdot (N_1 - N_2) - N_3^4 \cdot (7 \cdot N_1 + 3 \cdot N_2))})} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_3^4 \cdot (N_1 + N_2)}{(N_3^2 + 1) \cdot \left[N_1 + N_2 - N_3^2 \cdot (N_1 - N_2) - \sqrt{(N_1 + N_2) \cdot \left[N_1 + N_2 - 2 \cdot N_3^2 \cdot (N_1 - N_2) - N_3^4 \cdot (7 \cdot N_1 + 3 \cdot N_2)\right]}\right]} = 0$$

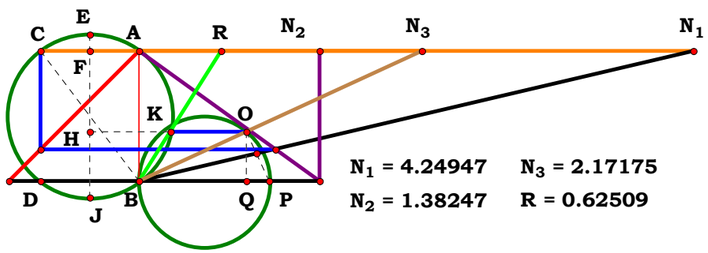
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot N_u^4 \cdot (A + B)}{(C^2 + N_u^2) \cdot \left[C^2 \cdot (A + B) + N_u^2 \cdot (A - B) - \sqrt{(A + B) \cdot \left[C^4 \cdot (A + B) - N_u^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - B)\right]}\right]} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2 \cdot Z^4 \cdot (X \cdot p + Y \cdot o)}{(Z^2 + q^2) \cdot \left[Z^2 \cdot (Y \cdot o - X \cdot p) - \sqrt{(X \cdot p + Y \cdot o) \cdot \left[Y \cdot o \cdot (2 \cdot Z^2 \cdot q^2 - 3 \cdot Z^4 + q^4) - X \cdot p \cdot (7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4)\right]} + q^2 \cdot (X \cdot p + Y \cdot o)\right]} = 0$$

4RST10AAB3R4



Unit. $AB := 1$ Given. $N_1 := 4.24947$ $N_2 := 1.38247$ $N_3 := 2.17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

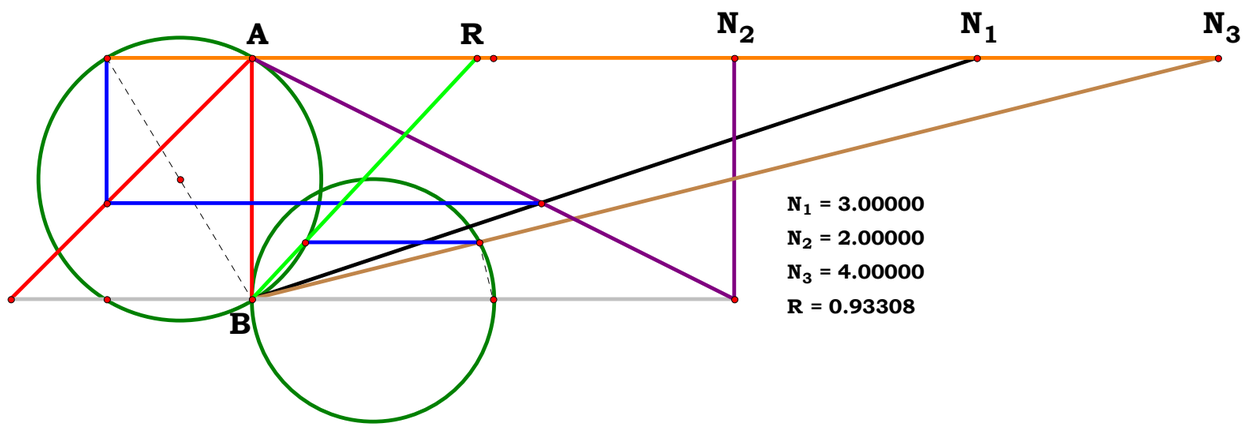
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.625087$



$$\frac{\sqrt{(N_1^2-2\cdot N_3^2\cdot(N_1^2+4\cdot N_1\cdot N_2+2\cdot N_2^2))+N_1^2\cdot N_3^4+4\cdot N_3\cdot(N_1+N_2)^2\cdot(N_3^2+1)}-N_1\cdot(N_3^2+1)}{2\cdot N_3\cdot(N_1+N_2)}-R = 0.00000$$

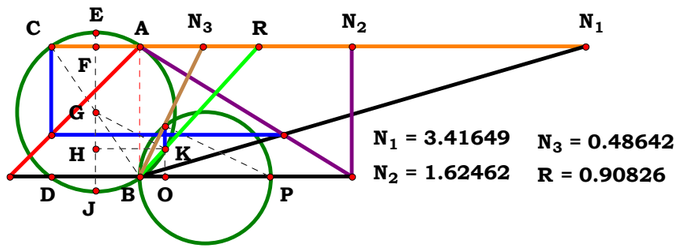
Definitions.

$$R - \frac{\sqrt{N_1^2 - 2\cdot N_3^2\cdot\left(N_1^2 + 4\cdot N_1\cdot N_2 + 2\cdot N_2^2\right) + N_1^2\cdot N_3^4 + 4\cdot N_3\cdot\left(N_1 + N_2\right)^2\cdot\left(N_3^2 + 1\right)} - N_1\cdot\left(N_3^2 + 1\right)}{2\cdot N_3\cdot\left(N_1 + N_2\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2\cdot C^4 + B^2\cdot N_u^4 + 4\cdot C\cdot N_u^3\cdot(A+B)^2 + 4\cdot C^3\cdot N_u\cdot(A+B)^2 - 2\cdot C^2\cdot N_u^2\cdot\left(2\cdot A^2 + 4\cdot A\cdot B + B^2\right)} - B\cdot\left(C^2 + N_u^2\right)}{2\cdot C\cdot N_u\cdot(A+B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4\cdot Y\cdot Z\cdot o\cdot q\cdot\left(Z^2 - Z\cdot q + q^2\right)\cdot(2\cdot X\cdot p + Y\cdot o) + X^2\cdot p^2\cdot\left(Z^4 + 4\cdot Z^3\cdot q - 2\cdot Z^2\cdot q^2 + 4\cdot Z\cdot q^3 + q^4\right)} - X\cdot p\cdot\left(Z^2 + q^2\right)}{2\cdot Z\cdot q\cdot(X\cdot p + Y\cdot o)} = 0$$

4RST10AAB3R5



Unit. $AB := 1$ Given. $N_1 := 3.41649$ $N_2 := 1.62462$ $N_3 := .48642$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

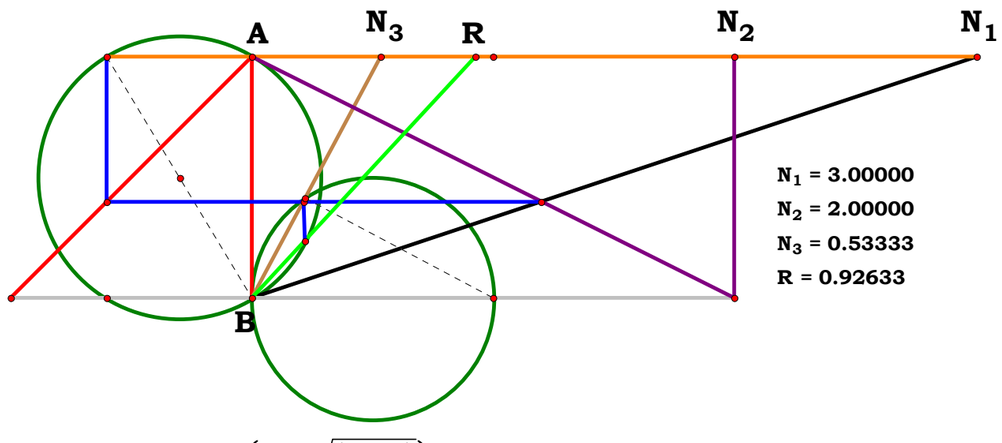
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $BO := \frac{N_3^2}{N_3^2 + 1}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $R := \frac{BO}{KO}$

$R = 0.908272$



$$\frac{\left(2\cdot N_3^{2}\cdot\sqrt{(N_1+N_2)}\right)}{(N_3^{2}+1)\cdot\sqrt{(N_1+N_2)}-\sqrt{(N_1+N_2)\cdot 2\cdot N_3^{2}\cdot(N_1-N_2)-N_3^{4}\cdot(7\cdot N_1+3\cdot N_2)}}-R = 0.00000$$

Definitions.

$$R - \frac{2\cdot N_3^{2}\cdot\sqrt{N_1+N_2}}{\sqrt{N_1+N_2}\cdot\left(N_3^{2}+1\right)-\sqrt{N_1+N_2-2\cdot N_3^{2}\cdot\left(N_1-N_2\right)-N_3^{4}\cdot\left(7\cdot N_1+3\cdot N_2\right)}} = 0$$

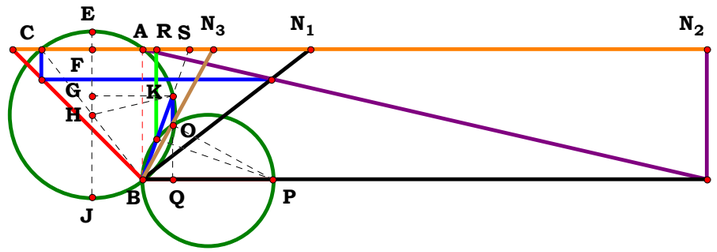
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2\cdot N_u^{2}\cdot\sqrt{N_u\cdot(A+B)}}{\sqrt{N_u\cdot(A+B)}\cdot\left(C^2+N_u^{2}\right)-\sqrt{N_u\cdot\left[C^4\cdot(A+B)-N_u^{4}\cdot(3\cdot A+7\cdot B)+2\cdot C^2\cdot N_u^{2}\cdot(A-B)\right]}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2\cdot Z^2\cdot\sqrt{X\cdot p+Y\cdot o}}{\sqrt{X\cdot p+Y\cdot o}\cdot\left(Z^2+q^2\right)-\sqrt{Y\cdot o\cdot\left(2\cdot Z^2\cdot q^2-3\cdot Z^4+q^4\right)-X\cdot p\cdot\left(7\cdot Z^4+2\cdot Z^2\cdot q^2-q^4\right)}} = 0$$

4RST10AAB4R0



$N_1 = 1.28562$
$N_2 = 4.32695$
$N_3 = 0.54454$
$R = 0.11132$

Unit. $AB := 1$ **Given.** $N_1 := 1.28562$ $N_2 := 4.32695$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

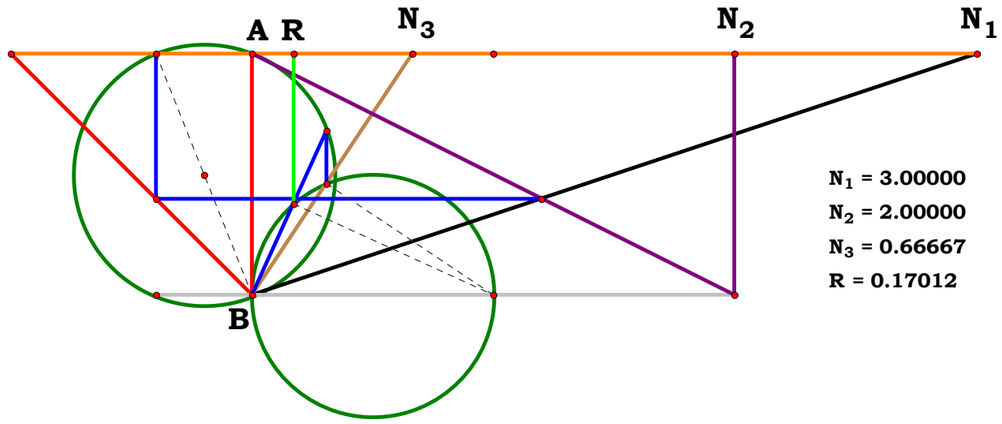
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $AS := \frac{GK - AF}{AB - FG}$

$R := \frac{AS^2}{AS^2 + 1}$ $R = 0.111319$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.66667$
$R = 0.17012$

$$\frac{(2 \cdot N_3^4 \cdot (N_1 + N_2))}{(N_3^2+1) \cdot (((N_1+N_2)+N_3^2 \cdot (N_1-N_2)) + \sqrt{(N_1+N_2)} \cdot \sqrt{((N_1+N_2)+2 \cdot N_3^2 \cdot (N_1-N_2)) - N_3^4 \cdot (3 \cdot N_1 + 7 \cdot N_2)})} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_3^4 \cdot (N_1 + N_2)}{(N_3^2 + 1) \cdot \left[N_1 + N_2 + N_3^2 \cdot (N_1 - N_2) + \sqrt{N_1 + N_2} \cdot \sqrt{N_1 + N_2 + 2 \cdot N_3^2 \cdot (N_1 - N_2) - N_3^4 \cdot (3 \cdot N_1 + 7 \cdot N_2)}\right]} = 0$$

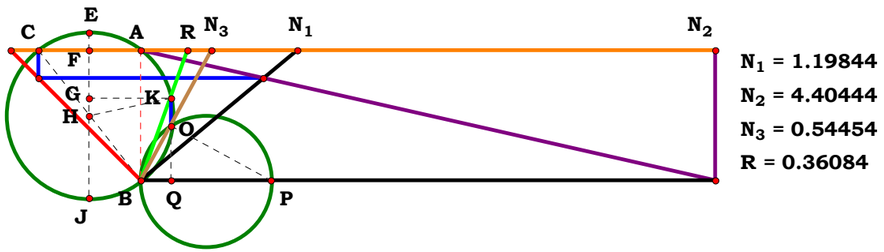
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot N_u^5 \cdot (A + B)}{(C^2 + N_u^2) \cdot \left[\sqrt{-N_u \cdot \left[N_u^4 \cdot (7 \cdot A + 3 \cdot B) - C^4 \cdot (A + B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - B)\right]} \cdot \sqrt{N_u \cdot (A + B)} - N_u^3 \cdot (A - B) + C^2 \cdot N_u \cdot (A + B)\right]} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2 \cdot Z^4 \cdot \left(\sqrt{X \cdot p + Y \cdot o}\right)^2}{(Z^2 + q^2) \cdot \left[\sqrt{X \cdot p + Y \cdot o} \cdot \sqrt{2 \cdot Z^2 \cdot q^2 \cdot (X \cdot p - Y \cdot o) + q^4 \cdot (X \cdot p + Y \cdot o) - Z^4 \cdot (3 \cdot X \cdot p + 7 \cdot Y \cdot o)} + Z^2 \cdot (X \cdot p - Y \cdot o) + q^2 \cdot (X \cdot p + Y \cdot o)\right]} = 0$$

4RST10AAB4R1



Unit. $AB := 1$ Given. $N_1 := 1.19844$ $N_2 := 4.40444$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

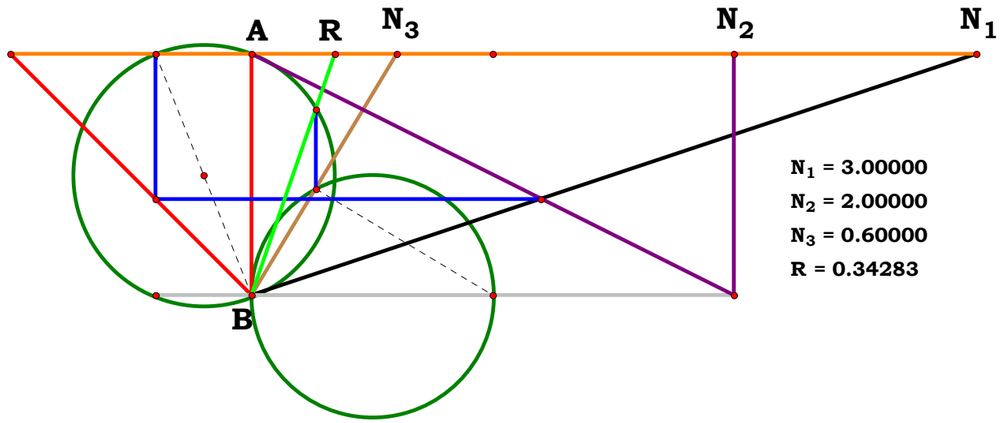
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $R := \frac{GK - AF}{AB - FG}$

$R = 0.360842$



$\frac{(2 \cdot N_3^2 \cdot \sqrt{(N_1+N_2)})}{(N_3^2+1) \cdot \sqrt{(N_1+N_2)} + \sqrt{((N_1+N_2)+2 \cdot N_3^2 \cdot (N_1-N_2)) - N_3^4 \cdot (3 \cdot N_1+7 \cdot N_2)}} - R = 0.00000$

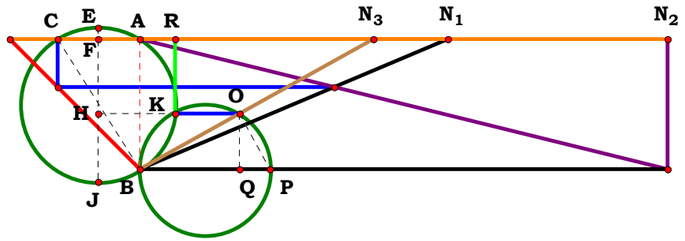
Definitions.

$R - \frac{2 \cdot N_3^2 \cdot \sqrt{N_1 + N_2}}{\sqrt{N_1 + N_2} \cdot \left(N_3^2 + 1\right) + \sqrt{N_1 + N_2 + 2 \cdot N_3^2 \cdot \left(N_1 - N_2\right) - N_3^4 \cdot \left(3 \cdot N_1 + 7 \cdot N_2\right)}} = 0$ $\quad N_1 - \frac{N_u}{A} = 0$ $\quad N_2 - \frac{N_u}{B} = 0$ $\quad N_3 - \frac{N_u}{C} = 0$

$R - \frac{2 \cdot N_u^2 \cdot \sqrt{N_u \cdot (A + B)}}{\sqrt{N_u \cdot \left[(A + B) \cdot C^4 + -2 \cdot C^2 \cdot N_u^2 \cdot (A - B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B)\right]} + \sqrt{\left[N_u \cdot (A + B)\right]} \cdot \left(C^2 + N_u^2\right)} = 0$ $\quad N_1 - \frac{X}{o} = 0$ $\quad N_2 - \frac{Y}{p} = 0$ $\quad N_3 - \frac{Z}{q} = 0$

$R - \frac{2 \cdot Z^2 \cdot \sqrt{X \cdot p + Y \cdot o}}{\sqrt{X \cdot p + Y \cdot o} \cdot \left(Z^2 + q^2\right) + \sqrt{2 \cdot Z^2 \cdot q^2 \cdot (X \cdot p - Y \cdot o) + q^4 \cdot (X \cdot p + Y \cdot o) - Z^4 \cdot (3 \cdot X \cdot p + 7 \cdot Y \cdot o)}} = 0$

4RST10AAB4R2



$N_1 = 2.36074$
$N_2 = 4.04606$
$N_3 = 1.79401$
$R = 0.27086$

Unit. $AB := 1$ **Given.** $N_1 := 2.36074$ $N_2 := 4.04606$ $N_3 := 1.79401$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

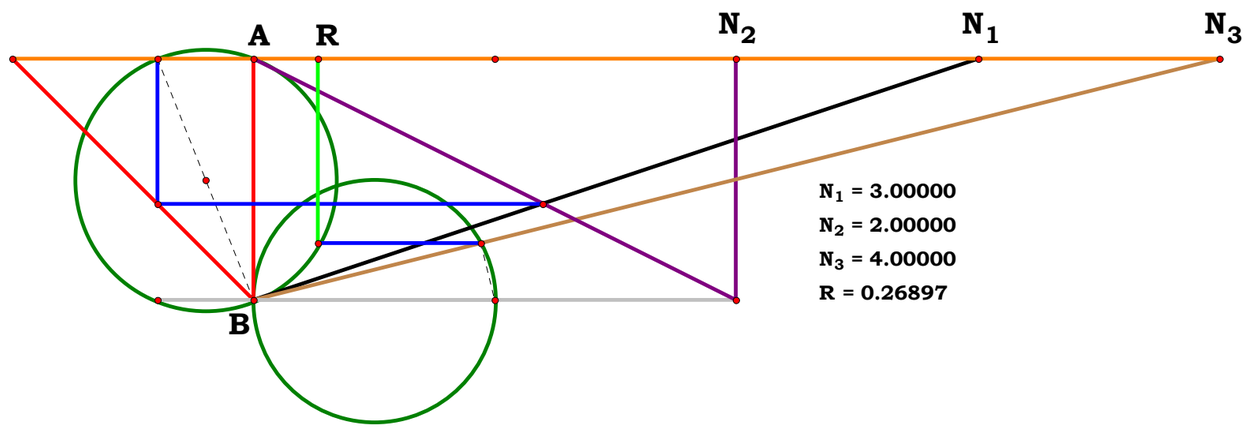
$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := HK - AF$

$R = 0.270857$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$R = 0.26897$

$$\frac{\sqrt{(N_2^2-2\cdot N_3^2\cdot(2\cdot N_1^2+4\cdot N_1\cdot N_2+N_2^2))+N_2^2\cdot N_3^4+4\cdot N_3\cdot(N_1+N_2)^2\cdot(N_3^2+1)}-N_2\cdot(N_3^2+1)}{2\cdot(N_1+N_2)\cdot(N_3^2+1)}-R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_2^2 - 2\cdot N_3^2\cdot\left(2\cdot N_1^2 + 4\cdot N_1\cdot N_2 + N_2^2\right) + N_2^2\cdot N_3^4 + 4\cdot N_3\cdot\left(N_1 + N_2\right)^2\cdot\left(N_3^2 + 1\right)} - N_2\cdot\left(N_3^2 + 1\right)}{2\cdot\left(N_1 + N_2\right)\cdot\left(N_3^2 + 1\right)} = 0$$

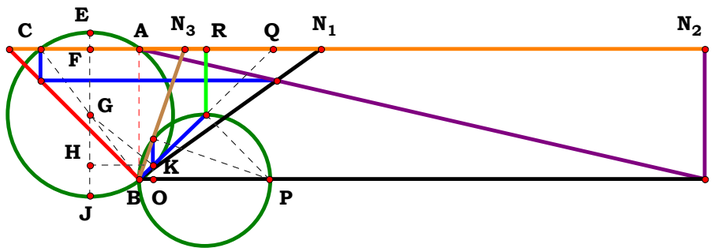
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{A^2\cdot C^4 + A^2\cdot N_u^4 + 4\cdot C\cdot N_u^3\cdot(A+B)^2 + 4\cdot C^3\cdot N_u\cdot(A+B)^2 - 2\cdot C^2\cdot N_u^2\cdot\left(A^2 + 4\cdot A\cdot B + 2\cdot B^2\right)} - A\cdot\left(C^2 + N_u^2\right)}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{4\cdot X\cdot Z\cdot p\cdot q\cdot\left(Z^2 - Z\cdot q + q^2\right)\cdot(X\cdot p + 2\cdot Y\cdot o) + Y^2\cdot o^2\cdot\left(Z^4 + 4\cdot Z^3\cdot q - 2\cdot Z^2\cdot q^2 + 4\cdot Z\cdot q^3 + q^4\right)} - Y\cdot o\cdot\left(Z^2 + q^2\right)}{2\cdot(X\cdot p + Y\cdot o)\cdot\left(Z^2 + q^2\right)} = 0$$

4RST10AAB4R3



$N_1 = 1.39216$
$N_2 = 4.33664$
$N_3 = 0.35082$
$R = 0.51543$

Unit. $AB := 1$ **Given.** $N_1 := 1.39216$ $N_2 := 4.33664$ $N_3 := .35082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

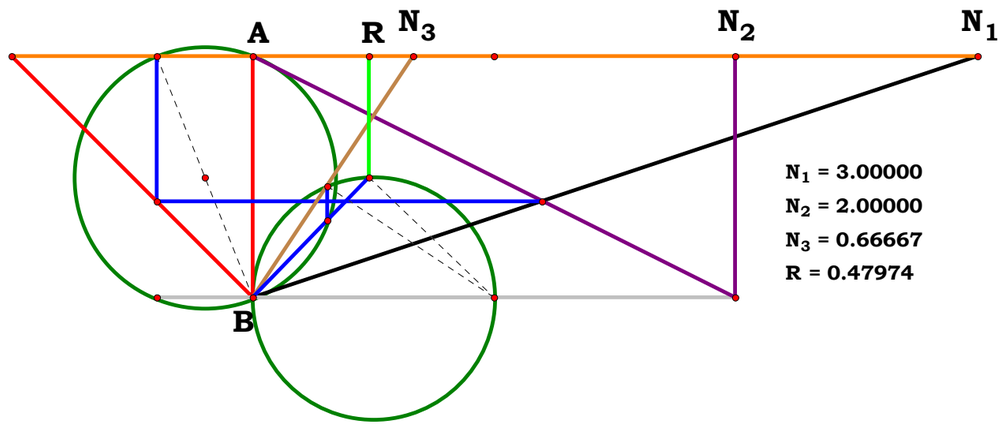
$BO := \frac{N_3^2}{N_3^2 + 1}$ $GK := \frac{EJ}{2}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $AQ := \frac{BO}{KO}$

AO^2

$R := \frac{AQ^2}{AQ^2 + 1}$ $R = 0.51543$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.66667$
$R = 0.47974$

$$\frac{(2 \cdot N_3^4 \cdot (N_1 + N_2))}{(N_3^2+1) \cdot ((N_1+N_2) + N_3^2 \cdot (N_1 - N_2)) - (N_3^2+1) \cdot \sqrt{((N_1+N_2) \cdot (((N_1+N_2) - N_3^4 \cdot (3 \cdot N_1 + 7 \cdot N_2)) + 2 \cdot N_3^2 \cdot (N_1 - N_2)))}} - R = 0.00000$$

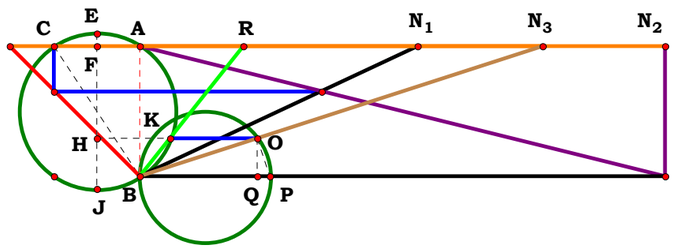
Definitions.

$$R - \frac{2 \cdot N_3^4 \cdot (N_1 + N_2)}{(N_3^2 + 1) \cdot [N_1 + N_2 + N_3^2 \cdot (N_1 - N_2)] - (N_3^2 + 1) \cdot \sqrt{(N_1 + N_2) \cdot [N_1 + N_2 - N_3^4 \cdot (3 \cdot N_1 + 7 \cdot N_2) + 2 \cdot N_3^2 \cdot (N_1 - N_2)]}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot N_u^4 \cdot (A + B)}{(C^2 + N_u^2) \cdot \left[C^2 \cdot (A + B) - N_u^2 \cdot (A - B) - \sqrt{(A + B) \cdot [C^4 \cdot (A + B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A - B)]}\right]} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Z^4 \cdot (X \cdot p + Y \cdot o)}{(Z^2 + q^2) \cdot \left[Y \cdot o \cdot q^2 - Y \cdot Z^2 \cdot o + X \cdot p \cdot (Z^2 + q^2) - \sqrt{(X \cdot p + Y \cdot o) \cdot (X \cdot p \cdot q^4 - 7 \cdot Y \cdot Z^4 \cdot o - 3 \cdot X \cdot Z^4 \cdot p + Y \cdot o \cdot q^4 + 2 \cdot X \cdot Z^2 \cdot p \cdot q^2 - 2 \cdot Y \cdot Z^2 \cdot o \cdot q^2)}\right]} = 0$$

4RST10AAB4R4



$N_1 = 2.12828$
$N_2 = 4.02669$
$N_3 = 3.09190$
$R = 0.79682$

Unit. $AB := 1$ Given. $N_1 := 2.12828$ $N_2 := 4.02669$ $N_3 := 3.09190$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

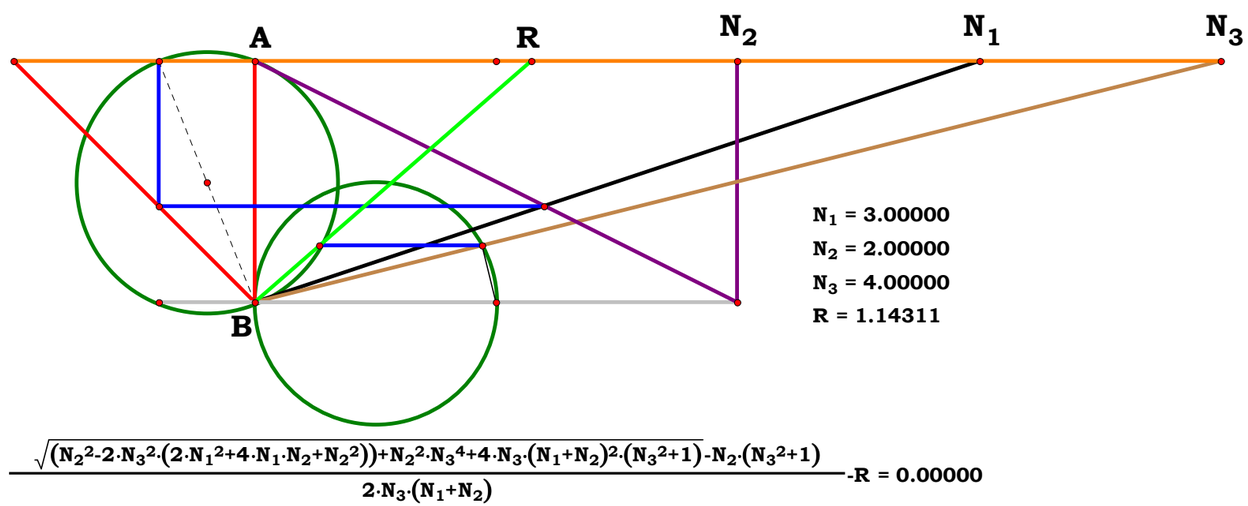
$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.796824$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$R = 1.14311$

$$\frac{\sqrt{(N_2^2-2\cdot N_3^2\cdot(2\cdot N_1^2+4\cdot N_1\cdot N_2+N_2^2))+N_2^2\cdot N_3^4+4\cdot N_3\cdot(N_1+N_2)^2\cdot(N_3^2+1)}-N_2\cdot(N_3^2+1)}{2\cdot N_3\cdot(N_1+N_2)}-R = 0.00000$$

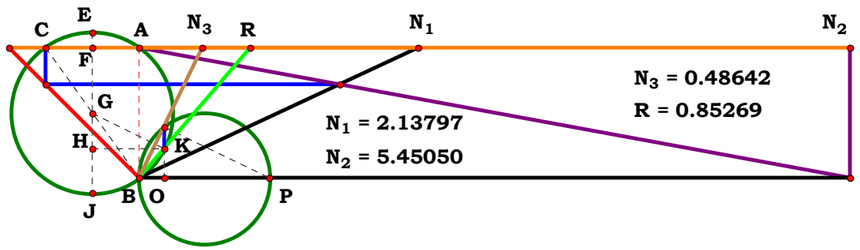
Definitions.

$$R - \frac{\sqrt{N_2^2 - 2\cdot N_3^2\cdot\left(2\cdot N_1^2 + 4\cdot N_1\cdot N_2 + N_2^2\right) + N_2^2\cdot N_3^4 + 4\cdot N_3\cdot\left(N_1 + N_2\right)^2\cdot\left(N_3^2 + 1\right)} - N_2\cdot\left(N_3^2 + 1\right)}{2\cdot N_3\cdot\left(N_1 + N_2\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{A^2\cdot\left(C^4 + N_u^4\right) - 2\cdot C^2\cdot N_u^2\cdot\left(A^2 + 4\cdot A\cdot B + 2\cdot B^2\right) + 4\cdot C\cdot N_u\cdot\left(C^2 + N_u^2\right)\cdot(A + B)^2} - A\cdot\left(C^2 + N_u^2\right)}{2\cdot C\cdot N_u\cdot(A + B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y^2\cdot o^2\cdot\left(Z^4 + 4\cdot Z^3\cdot q - 2\cdot Z^2\cdot q^2 + 4\cdot Z\cdot q^3 + q^4\right) + 4\cdot X\cdot Z\cdot p\cdot q\cdot\left(Z^2 - Z\cdot q + q^2\right)\cdot(X\cdot p + 2\cdot Y\cdot o)} - Y\cdot o\cdot\left(Z^2 + q^2\right)}{2\cdot Z\cdot q\cdot(X\cdot p + Y\cdot o)} = 0$$

4RST10AAB4R5



Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 5.45050$ $N_3 := .48642$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

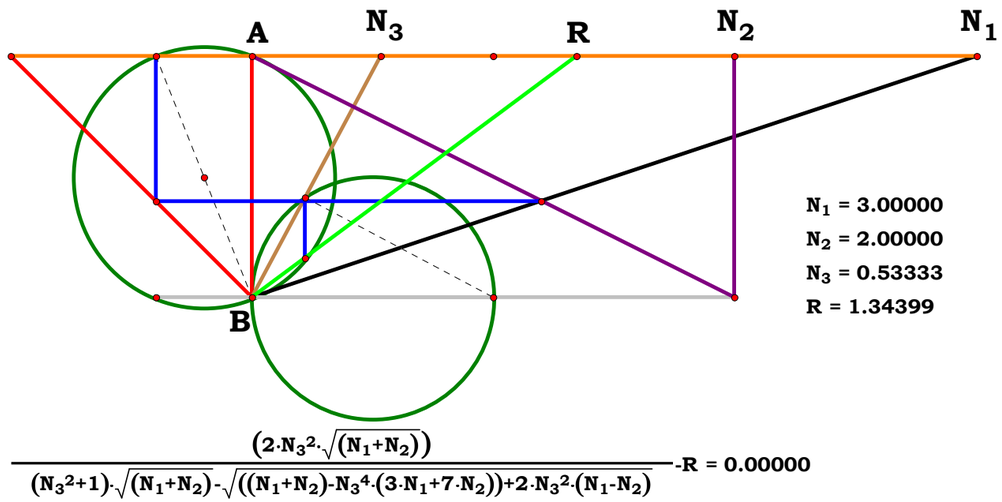
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $BO := \frac{N_3^2}{N_3^2 + 1}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $R := \frac{BO}{KO}$

$R = 0.852704$



$$\frac{(2 \cdot N_3^2 \cdot \sqrt{(N_1+N_2)})}{(N_3^2+1) \cdot \sqrt{(N_1+N_2)} - \sqrt{((N_1+N_2) - N_3^4 \cdot (3 \cdot N_1 + 7 \cdot N_2)) + 2 \cdot N_3^2 \cdot (N_1 - N_2)}} - R = 0.00000$$

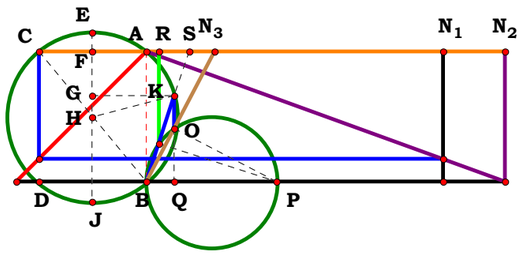
Definitions.

$$R - \frac{2 \cdot N_3^2 \cdot \sqrt{N_1 + N_2}}{\sqrt{N_1 + N_2} \cdot \left(N_3^2 + 1\right) - \sqrt{N_1 + N_2 - N_3^4 \cdot \left(3 \cdot N_1 + 7 \cdot N_2\right) + 2 \cdot N_3^2 \cdot \left(N_1 - N_2\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot N_u^2 \cdot \sqrt{N_u \cdot (A + B)}}{\sqrt{N_u \cdot (A + B)} \cdot \left(C^2 + N_u^2\right) - \sqrt{N_u \cdot \left[(A + B) \cdot C^4 - 2 \cdot C^2 \cdot N_u^2 \cdot (A - B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B)\right]}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Z^2 \cdot \sqrt{X \cdot p + Y \cdot o}}{\sqrt{X \cdot p + Y \cdot o} \cdot \left(Z^2 + q^2\right) - \sqrt{2 \cdot Z^2 \cdot q^2 \cdot (X \cdot p - Y \cdot o) + q^4 \cdot (X \cdot p + Y \cdot o) - Z^4 \cdot (3 \cdot X \cdot p + 7 \cdot Y \cdot o)}} = 0$$

4RST10AAB5R0



$N_1 = 2.27357$
$N_2 = 2.74817$
$N_3 = 0.52517$
$R = 0.09789$

Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 2.74817$ $N_3 := .52517$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

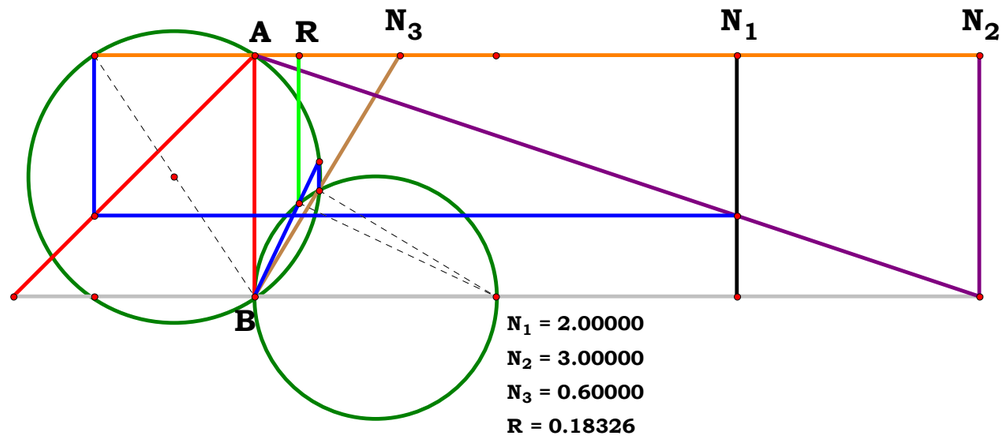
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $AS := \frac{GK - AF}{AB - FG}$

$R := \frac{AS^2}{AS^2 + 1}$ $R = 0.097888$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.60000$
$R = 0.18326$

$\frac{(2 \cdot N_2 \cdot N_3^4)}{(N_3^2+1) \cdot (((N_2 - 2 \cdot N_1 \cdot N_3^2) + N_2 \cdot N_3^2) + \sqrt{N_2^2 - 4 \cdot N_1 \cdot N_2 \cdot N_3^2 \cdot (N_3^2+1) - N_2^2 \cdot N_3^2 \cdot (3 \cdot N_3^2 - 2)})} - R = 0.00000$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3^4}{\left(N_3^2 + 1\right) \cdot \left[N_2 - 2 \cdot N_1 \cdot N_3^2 + N_2 \cdot N_3^2 + \sqrt{N_2^2 - 4 \cdot N_1 \cdot N_2 \cdot N_3^2 \cdot \left(N_3^2 + 1\right) - N_2^2 \cdot N_3^2 \cdot \left(3 \cdot N_3^2 - 2\right)}\right]} = 0$$

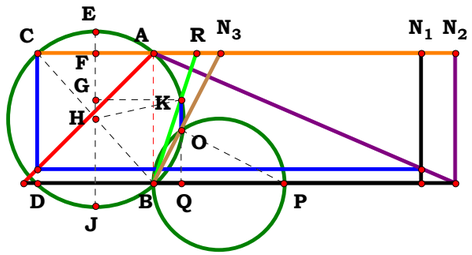
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot \left(\sqrt{A}\right)^2 \cdot N_u^4}{\left(C^2 + N_u^2\right) \cdot \left[\sqrt{A} \cdot \sqrt{A \cdot C^4 - N_u^4 \cdot (3 \cdot A + 4 \cdot B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - 2 \cdot B)} + A \cdot C^2 + N_u^2 \cdot (A - 2 \cdot B)\right]} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2 \cdot Y \cdot Z^4 \cdot \left(\sqrt{o}\right)^2}{\left(Z^2 + q^2\right) \cdot \left(\sqrt{o} \cdot \sqrt{2 \cdot o \cdot Y^2 \cdot Z^2 \cdot q^2 - 3 \cdot o \cdot Y^2 \cdot Z^4 + o \cdot Y^2 \cdot q^4 - 4 \cdot X \cdot p \cdot Y \cdot Z^4 - 4 \cdot X \cdot p \cdot Y \cdot Z^2 \cdot q^2} + Y \cdot Z^2 \cdot o - 2 \cdot X \cdot Z^2 \cdot p + Y \cdot o \cdot q^2\right)} = 0$$

4RST10AAB5R1



$N_1 = 2.05079$
$N_2 = 2.31231$
$N_3 = 0.51548$
$R = 0.32778$

Unit. $AB := 1$ **Given.** $N_1 := 2.05079$ $N_2 := 2.31231$ $N_3 := .51548$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

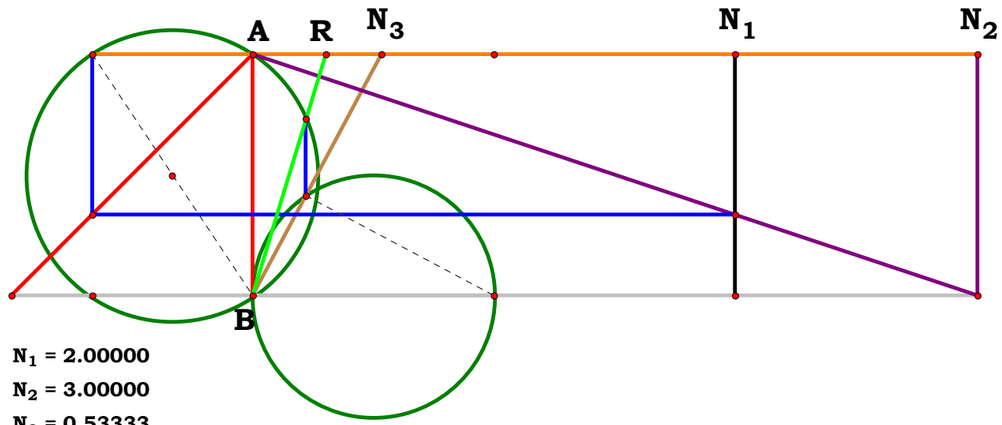
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $R := \frac{GK - AF}{AB - FG}$

$R = 0.327778$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.53333$
$R = 0.30298$

$$\frac{\left(2 \cdot N_3^2 \cdot \sqrt{N_2}\right)}{\left(N_3^2+1\right) \cdot \sqrt{N_2} + \sqrt{N_2 - N_3^4 \cdot (4 \cdot N_1 + 3 \cdot N_2) - 2 \cdot N_3^2 \cdot (2 \cdot N_1 - N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_3^2}{\sqrt{N_2} \cdot \left(N_3^2 + 1\right) + \sqrt{N_2 - N_3^4 \cdot \left(4 \cdot N_1 + 3 \cdot N_2\right) - 2 \cdot N_3^2 \cdot \left(2 \cdot N_1 - N_2\right)}} = 0$$

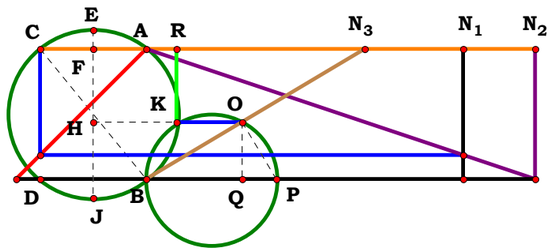
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot \left(C^2 + N_u^2\right) + \sqrt{B} \cdot \sqrt{N_u \cdot \left[A \cdot \left(C^2 - N_u^2\right) \cdot \left(C^2 + 3 \cdot N_u^2\right) - 4 \cdot B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)\right]}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{2 \cdot \sqrt{Y} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{p} \cdot \sqrt{Y \cdot o \cdot (q - Z) \cdot (Z + q) \cdot \left(3 \cdot Z^2 + q^2\right) - \left[4 \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2 + q^2\right)\right]} + \sqrt{o \cdot p} \cdot \sqrt{Y} \cdot \left(Z^2 + q^2\right)} = 0$$

4RST10AAB5R2



$N_1 = 2.42854$
$N_2 = 2.98063$
$N_3 = 1.67778$
$R = 0.23475$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 2.98063$ $N_3 := 1.67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

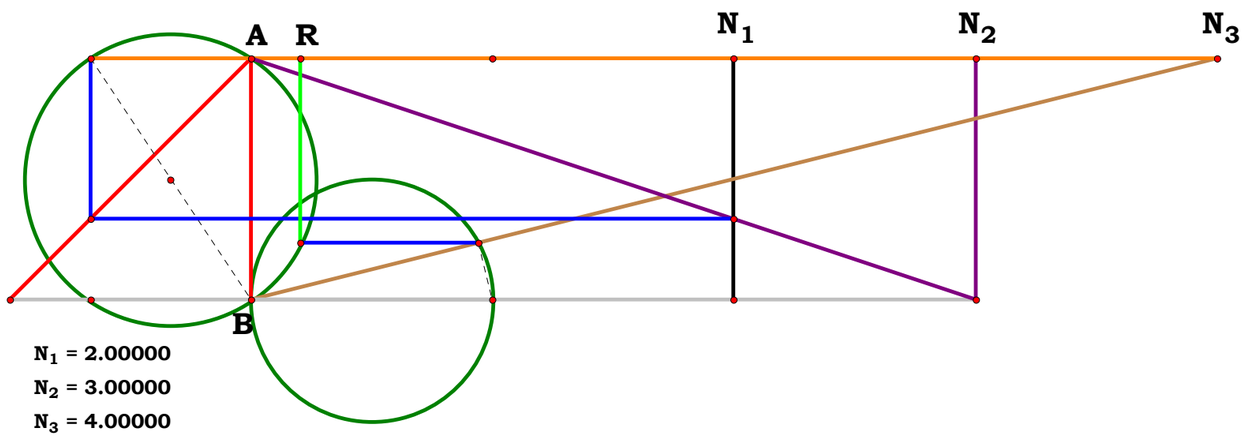
$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := HK - AF$

$R = 0.234749$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.20615$

$\frac{\sqrt{N_1^2 \cdot N_3^2 \cdot (N_3^2+2) + N_1^2 + 4 \cdot N_2^2 \cdot N_3 \cdot ((N_3^2 - N_3)+1)} - N_1 \cdot (N_3^2+1)}{2 \cdot N_2 \cdot (N_3^2+1)} - R = 0.00000$

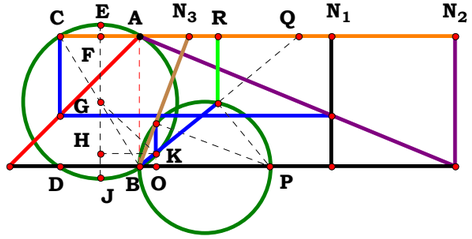
Definitions.

$$R - \frac{\sqrt{N_1^2 \cdot N_3^2 \cdot \left(N_3^2 + 2\right) + N_1^2 + 4 \cdot N_2^2 \cdot N_3 \cdot \left(N_3^2 - N_3 + 1\right)} - N_1 \cdot \left(N_3^2 + 1\right)}{2 \cdot N_2 \cdot \left(N_3^2 + 1\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot N_u \cdot \left(C^2 - C \cdot N_u + N_u^2\right) + B^2 \cdot \left(C^2 + N_u^2\right)^2} - B \cdot \left(C^2 + N_u^2\right)}{2 \cdot A \cdot \left(C^2 + N_u^2\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4 \cdot Y^2 \cdot Z \cdot o^2 \cdot q \cdot \left(Z^2 - Z \cdot q + q^2\right) + X^2 \cdot p^2 \cdot \left(Z^2 + q^2\right)^2} - X \cdot p \cdot \left(Z^2 + q^2\right)}{2 \cdot Y \cdot o \cdot \left(Z^2 + q^2\right)} = 0$$

4RST10AAB5R3



$N_1 = 1.46965$
$N_2 = 2.41885$
$N_3 = 0.37988$
$R = 0.59906$

Unit. $AB := 1$ **Given.** $N_1 := 1.46965$ $N_2 := 2.41885$ $N_3 := .37988$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

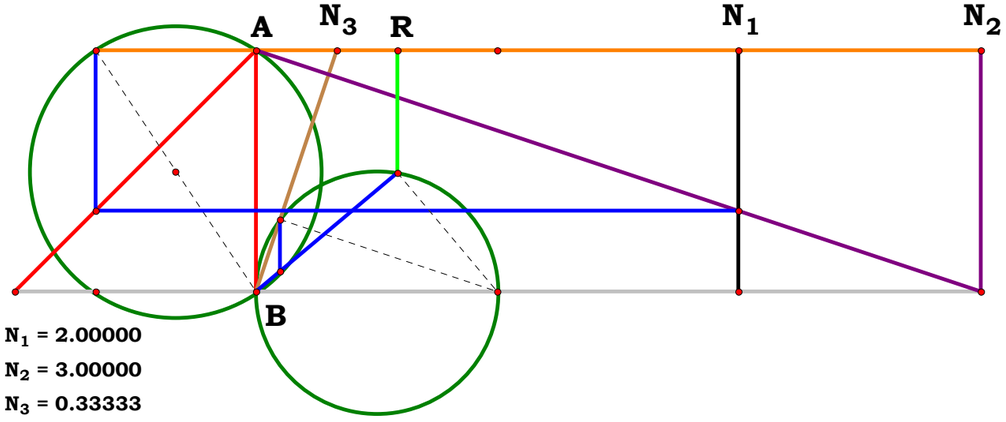
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BO := \frac{N_3^2}{N_3^2 + 1}$ $GK := \frac{EJ}{2}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $AQ := \frac{BO}{KO}$

$R := \frac{AQ^2}{AQ^2 + 1}$ $R = 0.599061$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.33333$
$R = 0.58823$

$$\frac{(2 \cdot N_2 \cdot N_3^4)}{(N_3^2+1) \cdot (((N_2 - 2 \cdot N_1 \cdot N_3^2) + N_2 \cdot N_3^2) - \sqrt{N_2^2 - N_2 \cdot N_3^4 \cdot (4 \cdot N_1 + 3 \cdot N_2) - 2 \cdot N_2 \cdot N_3^2 \cdot (2 \cdot N_1 - N_2)})} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3^4}{\left(N_3^2 + 1\right) \cdot \left[N_2 - 2 \cdot N_1 \cdot N_3^2 + N_2 \cdot N_3^2 - \sqrt{N_2^2 - N_2 \cdot N_3^4 \cdot \left(4 \cdot N_1 + 3 \cdot N_2\right) - 2 \cdot N_2 \cdot N_3^2 \cdot \left(2 \cdot N_1 - N_2\right)}\right]} = 0$$

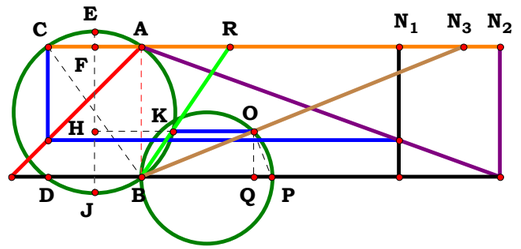
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{A}\right)^2 \cdot N_u^4}{\left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 - \sqrt{A} \cdot \sqrt{A \cdot \left(C^2 - N_u^2\right) \cdot \left(C^2 + 3 \cdot N_u^2\right) - 4 \cdot B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)} + N_u^2 \cdot (A - 2 \cdot B)\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Y \cdot Z^4 \cdot \left(\sqrt{o}\right)^2}{\left(Z^2 + q^2\right) \cdot \left[Z^2 \cdot (Y \cdot o - 2 \cdot X \cdot p) + Y \cdot o \cdot q^2 - \sqrt{o} \cdot \sqrt{Y^2 \cdot o \cdot (q - Z) \cdot (Z + q) \cdot \left(3 \cdot Z^2 + q^2\right) - 4 \cdot Y \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2 + q^2\right)}\right]} = 0$$

4RST10AAB5R4



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 2.47201$
$R = 0.68280$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 2.47201$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

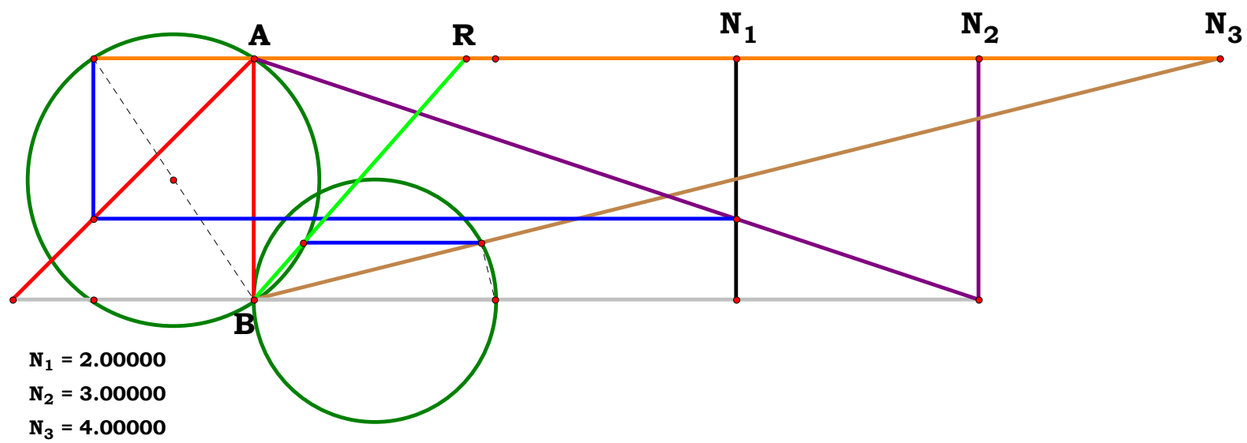
$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.682803$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.87614$

$\frac{\sqrt{N_1^2 \cdot N_3^4 + 4 \cdot N_2^2 \cdot N_3 \cdot (N_3^2+1) + 2 \cdot N_3^2 \cdot (N_1^2 - 2 \cdot N_2^2) + N_1^2} - N_1 \cdot (N_3^2+1)}{2 \cdot N_2 \cdot N_3} - R = 0.00000$

Definitions.

$R - \frac{\sqrt{N_1^2 \cdot N_3^4 + 4 \cdot N_2^2 \cdot N_3 \cdot (N_3^2+1) + 2 \cdot N_3^2 \cdot (N_1^2 - 2 \cdot N_2^2) + N_1^2} - N_1 \cdot (N_3^2+1)}{2 \cdot N_2 \cdot N_3} = 0$

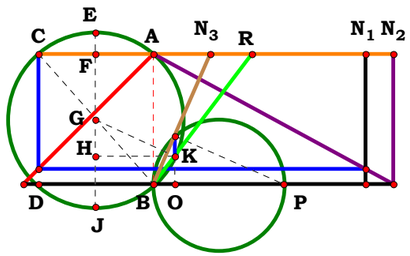
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{4 \cdot A^2 \cdot C \cdot N_u \cdot (C^2 - C \cdot N_u + N_u^2) + B^2 \cdot (C^2 + N_u^2)^2} - B \cdot (C^2 + N_u^2)}{2 \cdot A \cdot C \cdot N_u} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{4 \cdot Y^2 \cdot Z \cdot o^2 \cdot q \cdot (Z^2 - Z \cdot q + q^2) + X^2 \cdot p^2 \cdot (Z^2 + q^2)^2} - X \cdot Z^2 \cdot p - X \cdot p \cdot q^2}{2 \cdot Y \cdot Z \cdot o \cdot q} = 0$

4RST10AAB5R5



$N_1 = 1.62462$
$N_2 = 1.83771$
$N_3 = 0.43800$
$R = 0.75214$

Unit. $AB := 1$ Given. $N_1 := 1.62462$ $N_2 := 1.83771$ $N_3 := .43800$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

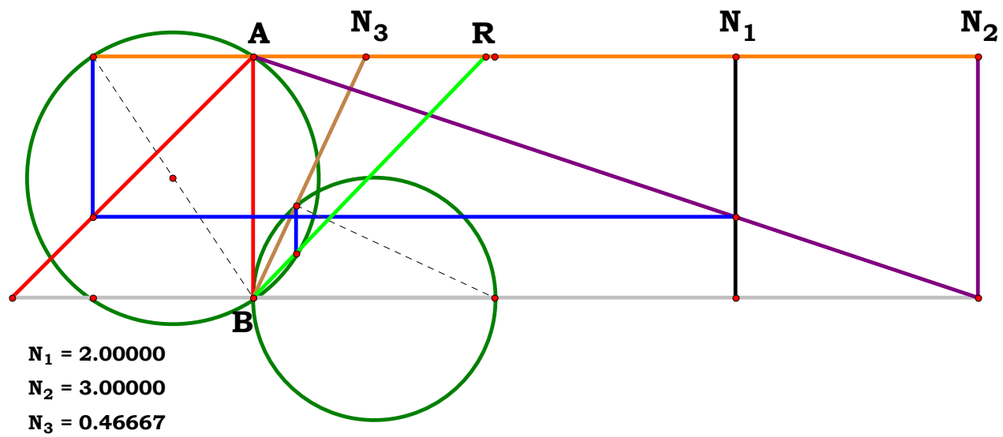
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $BO := \frac{N_3^2}{N_3^2 + 1}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $R := \frac{BO}{KO}$

$R = 0.752138$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.46667$
$R = 0.96312$

$$\frac{2 \cdot N_3^2 \cdot \sqrt{N_2}}{(N_3^2+1) \cdot \sqrt{N_2} - \sqrt{(N_2 + 2 \cdot N_3^2 \cdot (N_2 - 2 \cdot N_1)) - N_3^4 \cdot (4 \cdot N_1 + 3 \cdot N_2)}} - R = 0.00000$$

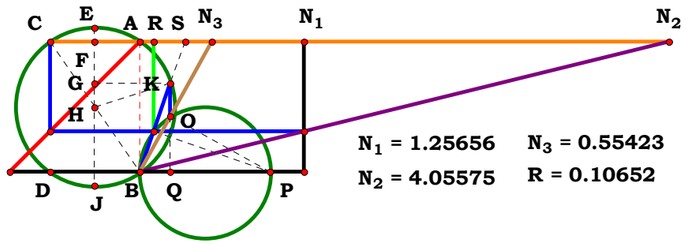
Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_3^2}{\sqrt{N_2} \cdot (N_3^2 + 1) - \sqrt{N_2 + 2 \cdot N_3^2 \cdot (N_2 - 2 \cdot N_1) - N_3^4 \cdot (4 \cdot N_1 + 3 \cdot N_2)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot (C^2 + N_u^2) - \sqrt{B} \cdot \sqrt{N_u \cdot \left[A \cdot C^4 - N_u^4 \cdot (3 \cdot A + 4 \cdot B) + 2 \cdot C^2 \cdot N_u^2 \cdot (A - 2 \cdot B)\right]}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot \sqrt{Y} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{Y} \cdot \sqrt{o \cdot p} \cdot (Z^2 + q^2) - \sqrt{p} \cdot \sqrt{Y \cdot o \cdot (q - Z) \cdot (Z + q) \cdot (3 \cdot Z^2 + q^2) - 4 \cdot X \cdot Z^2 \cdot p \cdot (Z^2 + q^2)}} = 0$$

4RST10AAB6R0



Unit. $AB := 1$ Given. $N_1 := 1.25656$ $N_2 := 4.05575$ $N_3 := .55423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

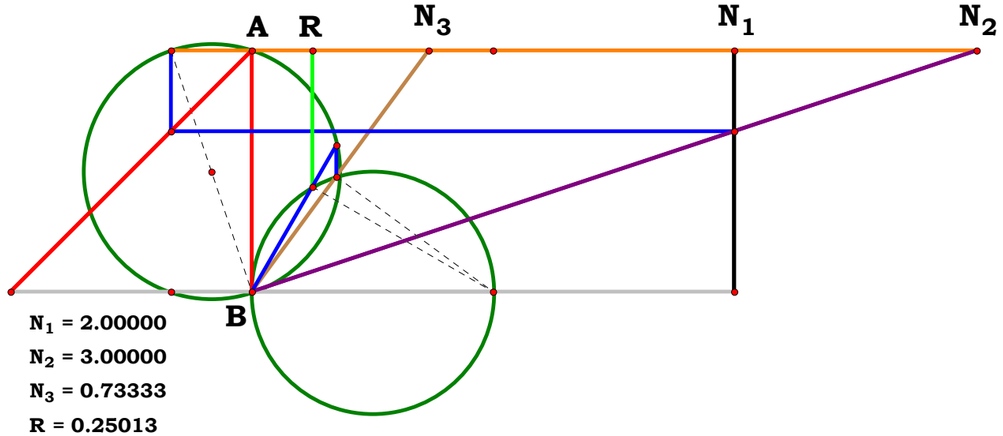
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $AS := \frac{GK - AF}{AB - FG}$

$R := \frac{AS^2}{AS^2 + 1}$ $R = 0.106528$



$$\frac{(2 \cdot N_2 \cdot N_3^4)}{(N_3^2+1) \cdot (((N_2+2 \cdot N_1 \cdot N_3^2)-N_2 \cdot N_3^2)+\sqrt{(N_2^2-2 \cdot N_2 \cdot N_3^2 \cdot (N_2-2 \cdot N_1))+N_2 \cdot N_3^4 \cdot (4 \cdot N_1-7 \cdot N_2)})} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3^4}{\left(N_3^2+1\right) \cdot \left[N_2+2 \cdot N_1 \cdot N_3^2-N_2 \cdot N_3^2+\sqrt{N_2^2-2 \cdot N_2 \cdot N_3^2 \cdot \left(N_2-2 \cdot N_1\right)+N_2 \cdot N_3^4 \cdot \left(4 \cdot N_1-7 \cdot N_2\right)}\right]} = 0$$

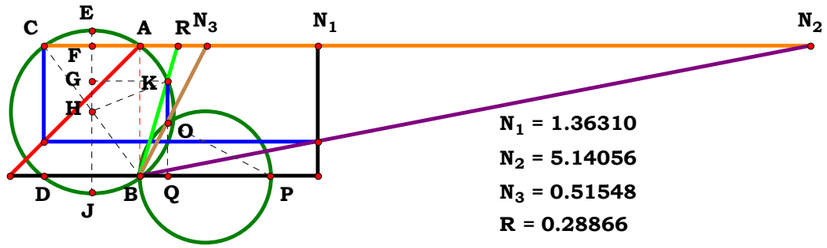
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{A}\right)^2 \cdot N_u^4}{\left(C^2+N_u^2\right) \cdot \left[\sqrt{A} \cdot \sqrt{A \cdot C^4-A \cdot N_u^2 \cdot \left(2 \cdot C^2+7 \cdot N_u^2\right)+4 \cdot B \cdot N_u^2 \cdot \left(C^2+N_u^2\right)}+A \cdot C^2-N_u^2 \cdot (A-2 \cdot B)\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Y \cdot Z^4 \cdot \left(\sqrt{o}\right)^2}{\left(Z^2+q^2\right) \cdot \left[\sqrt{o} \cdot \sqrt{4 \cdot Y \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2+q^2\right)-Y^2 \cdot o \cdot \left(7 \cdot Z^4+2 \cdot Z^2 \cdot q^2-q^4\right)}+Z^2 \cdot (2 \cdot X \cdot p-Y \cdot o)+Y \cdot o \cdot q^2\right]} = 0$$

4RST10AAB6R1



$N_1 = 1.36310$
$N_2 = 5.14056$
$N_3 = 0.51548$
$R = 0.28866$

Unit. $AB := 1$ **Given.** $N_1 := 1.36310$ $N_2 := 5.14056$ $N_3 := .51548$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

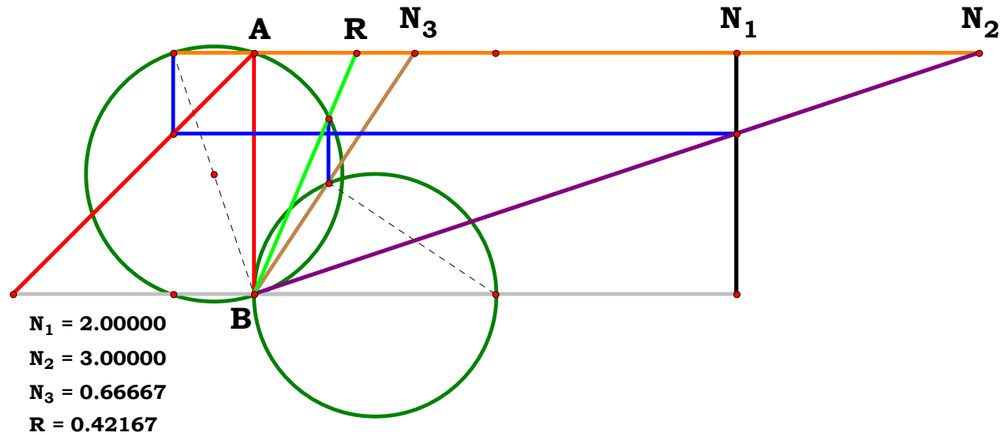
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BQ := \frac{N_3^2}{N_3^2 + 1}$ $GK := BQ + AF$

$HK := \frac{EJ}{2}$ $GH := \sqrt{HK^2 - GK^2}$

$FG := HK - (GH + EF)$ $R := \frac{GK - AF}{AB - FG}$

$R = 0.288656$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.66667$
$R = 0.42167$

$$\frac{\left(2 \cdot N_3^2 \cdot \sqrt{N_2}\right)}{\left(N_3^2+1\right) \cdot \sqrt{N_2} + \sqrt{\left(N_2 - 2 \cdot N_3^2 \cdot \left(N_2 - 2 \cdot N_1\right)\right) + N_3^4 \cdot \left(4 \cdot N_1 - 7 \cdot N_2\right)}} - R = 0.00000$$

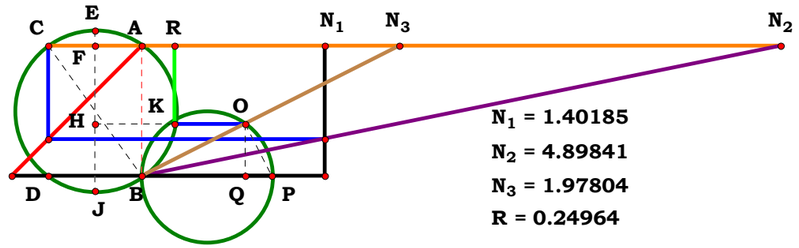
Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_3^2}{\sqrt{N_2} \cdot \left(N_3^2 + 1\right) + \sqrt{N_2 - 2 \cdot N_3^2 \cdot \left(N_2 - 2 \cdot N_1\right) + N_3^4 \cdot \left(4 \cdot N_1 - 7 \cdot N_2\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{B} \cdot \sqrt{N_u \cdot \left(A \cdot C^4 - 7 \cdot A \cdot N_u^4 + 4 \cdot B \cdot N_u^4 - 2 \cdot A \cdot C^2 \cdot N_u^2 + 4 \cdot B \cdot C^2 \cdot N_u^2\right)} + \sqrt{N_u} \cdot \sqrt{A \cdot B} \cdot \left(C^2 + N_u^2\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot \sqrt{Y} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{p} \cdot \sqrt{4 \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2 + q^2\right) - Y \cdot o \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)} + \sqrt{o \cdot p} \cdot \sqrt{Y} \cdot \left(Z^2 + q^2\right)} = 0$$

4RST10AAB6R2



$N_1 = 1.40185$
$N_2 = 4.89841$
$N_3 = 1.97804$
$R = 0.24964$

Unit. $AB := 1$ Given. $N_1 := 1.40185$ $N_2 := 4.89841$ $N_3 := 1.97804$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

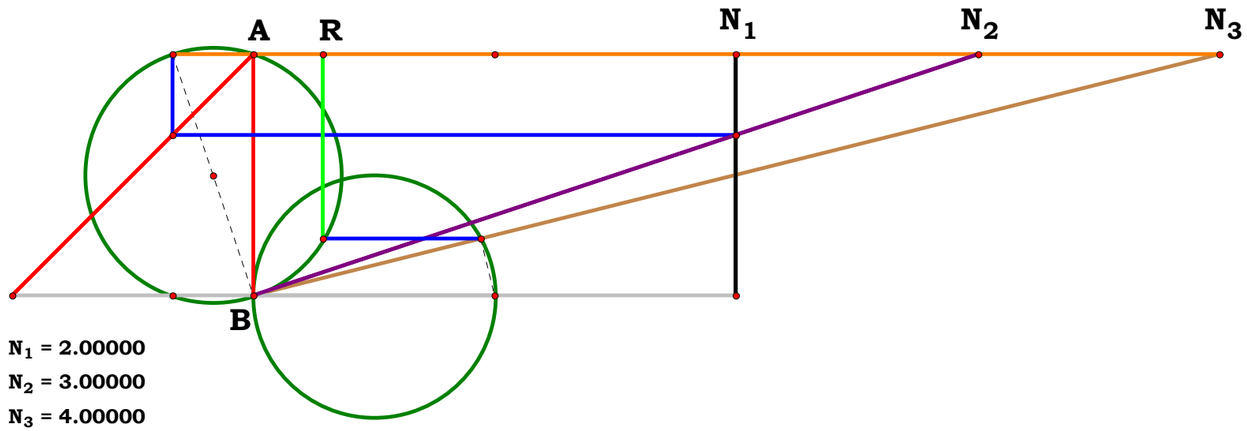
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := HK - AF$

$R = 0.249644$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.28908$

$$\frac{(N_3^2+1)\cdot(N_1-N_2)+\sqrt{((N_3^4\cdot(N_1-N_2)^2+4\cdot N_2^2\cdot N_3\cdot(N_3^2+1)+2\cdot N_3^2\cdot(N_1^2-2\cdot N_1\cdot N_2-N_2^2)+N_1^2)-2\cdot N_1\cdot N_2)+N_2^2}}{2\cdot N_2\cdot(N_3^2+1)} - R = 0.00000$$

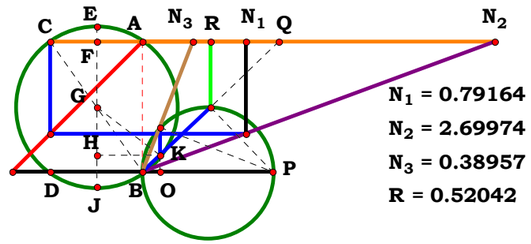
Definitions.

$$R - \frac{\left(N_3^2+1\right)\cdot\left(N_1-N_2\right)+\sqrt{N_3^4\cdot\left(N_1-N_2\right)^2+4\cdot N_2^2\cdot N_3\cdot\left(N_3^2+1\right)+2\cdot N_3^2\cdot\left(N_1^2-2\cdot N_1\cdot N_2-N_2^2\right)+N_1^2-2\cdot N_1\cdot N_2+N_2^2}}{2\cdot N_2\cdot\left(N_3^2+1\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u^2+4\cdot C\cdot N_u^3+N_u^4\right)-B\cdot\left(C^2+N_u^2\right)^2\cdot(2\cdot A-B)-C^2\cdot(A-B)-N_u^2\cdot(A-B)}}{2\cdot A\cdot\left(C^2+N_u^2\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\left(N_3^2+1\right)\cdot\left(N_1-N_2\right)+\sqrt{N_3^4\cdot\left(N_1-N_2\right)^2+4\cdot N_2^2\cdot N_3\cdot\left(N_3^2+1\right)+2\cdot N_3^2\cdot\left(N_1^2-2\cdot N_1\cdot N_2-N_2^2\right)+N_1^2-2\cdot N_1\cdot N_2+N_2^2}}{2\cdot N_2\cdot\left(N_3^2+1\right)} = 0$$

4RST10AAB6R3



$N_1 = 0.79164$
$N_2 = 2.69974$
$N_3 = 0.38957$
$R = 0.52042$

Unit. $AB := 1$ **Given.** $N_1 := .79164$ $N_2 := 2.69974$ $N_3 := .38957$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

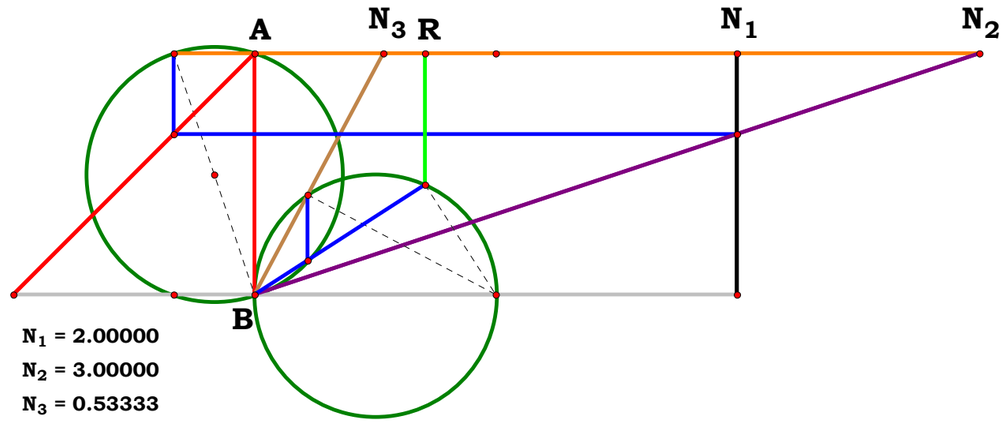
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BO := \frac{N_3^2}{N_3^2 + 1}$ $GK := \frac{EJ}{2}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $AQ := \frac{BO}{KO}$

$R := \frac{AQ^2}{AQ^2 + 1}$ $R = 0.520417$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.53333$
$R = 0.70448$

$$\frac{(2 \cdot N_2 \cdot N_3^4)}{(N_3^2+1) \cdot \left((N_2 + N_3^2 \cdot (2 \cdot N_1 - N_2)) - \sqrt{N_2 \cdot N_3^4 \cdot (4 \cdot N_1 - 7 \cdot N_2) + 2 \cdot N_2 \cdot N_3^2 \cdot (2 \cdot N_1 - N_2) + N_2^2}\right)} - R = 0.00000$$

Definitions.

$$R - \frac{2 \cdot N_2 \cdot N_3^4}{\left(N_3^2 + 1\right) \cdot \left[N_2 + N_3^2 \cdot \left(2 \cdot N_1 - N_2\right) - \sqrt{N_2 \cdot N_3^4 \cdot \left(4 \cdot N_1 - 7 \cdot N_2\right) + 2 \cdot N_2 \cdot N_3^2 \cdot \left(2 \cdot N_1 - N_2\right) + N_2^2}\right]} = 0$$

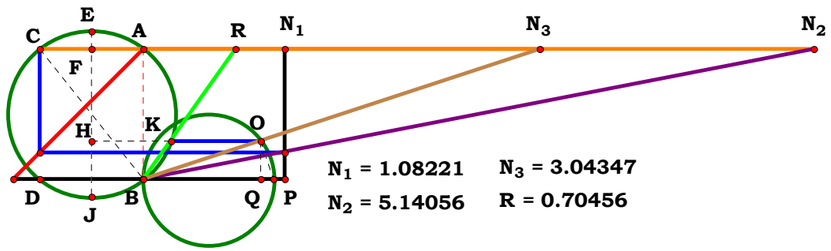
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{A}\right)^2 \cdot N_u^4}{\left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 - N_u^2 \cdot (A - 2 \cdot B) - \sqrt{A} \cdot \sqrt{A \cdot C^4 - N_u^4 \cdot (7 \cdot A - 4 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A - 2 \cdot B)}\right]} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot Y \cdot Z^4 \cdot \left(\sqrt{o}\right)^2}{\left(Z^2 + q^2\right) \cdot \left[Z^2 \cdot (2 \cdot X \cdot p - Y \cdot o) + Y \cdot o \cdot q^2 - \sqrt{o} \cdot \sqrt{4 \cdot Y \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2 + q^2\right) - Y^2 \cdot o \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)}\right]} = 0$$

4RST10AAB6R4



Unit. $AB := 1$ Given. $N_1 := 1.08221$ $N_2 := 5.14056$ $N_3 := 3.04347$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

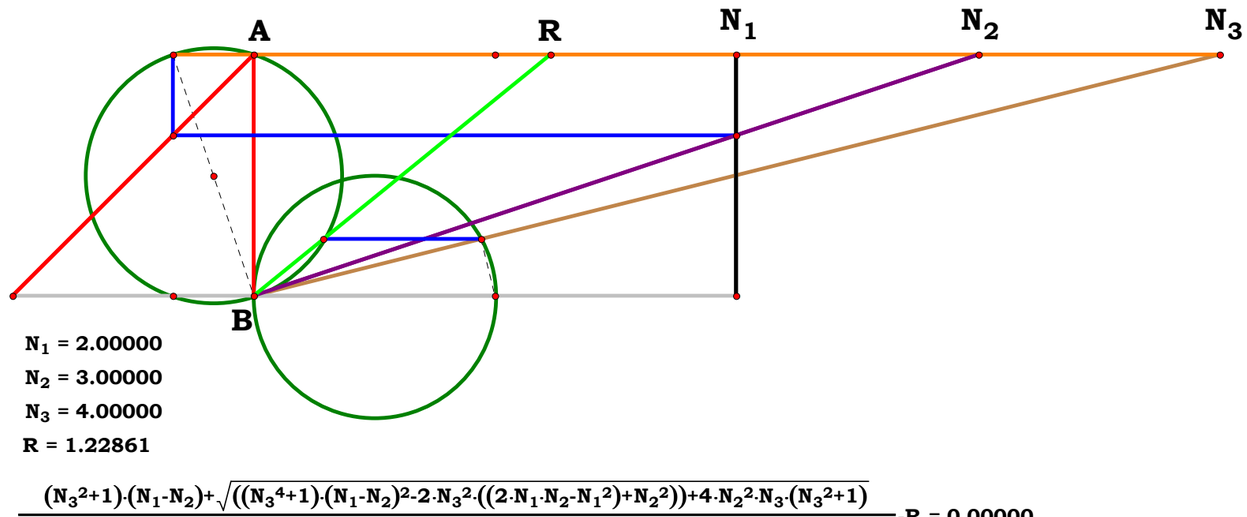
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$OQ := \frac{N_3}{N_3^2 + 1}$ $HJ := OQ + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \frac{HK - AF}{OQ}$

$R = 0.704559$



$\frac{(N_3^2+1)\cdot(N_1-N_2)+\sqrt{((N_3^4+1)\cdot(N_1-N_2)^2-2\cdot N_3^2\cdot((2\cdot N_1\cdot N_2-N_1^2)+N_2^2))+4\cdot N_2^2\cdot N_3\cdot(N_3^2+1)}}{(2\cdot N_2\cdot N_3)}-R = 0.00000$

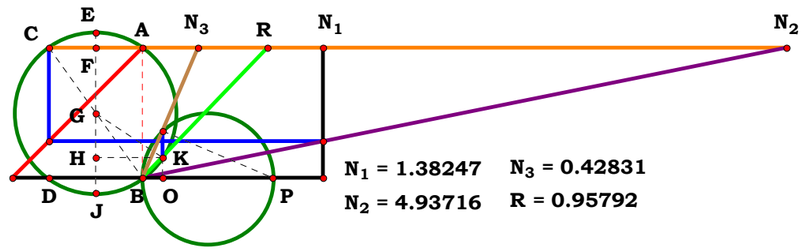
Definitions.

$R - \frac{\left(N_3^2+1\right)\cdot\left(N_1-N_2\right)+\sqrt{\left(N_3^4+1\right)\cdot\left(N_1-N_2\right)^2-2\cdot N_3^2\cdot\left(2\cdot N_1\cdot N_2-N_1^2+N_2^2\right)+4\cdot N_2^2\cdot N_3\cdot\left(N_3^2+1\right)}}{2\cdot N_2\cdot N_3} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u^2\right)^2\cdot(2\cdot A-B)-C^2\cdot(A-B)-N_u^2\cdot(A-B)}}{2\cdot N_u\cdot A\cdot C} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{Y^2\cdot o^2\cdot\left(Z^4+4\cdot Z^3\cdot q-2\cdot Z^2\cdot q^2+4\cdot Z\cdot q^3+q^4\right)+X\cdot p\cdot\left(Z^2+q^2\right)^2\cdot(X\cdot p-2\cdot Y\cdot o)}+\left(Z^2+q^2\right)\cdot(X\cdot p-Y\cdot o)}{2\cdot Y\cdot Z\cdot o\cdot q} = 0$

4RST10AAB6R5



Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 4.93716$ $N_3 := .42831$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

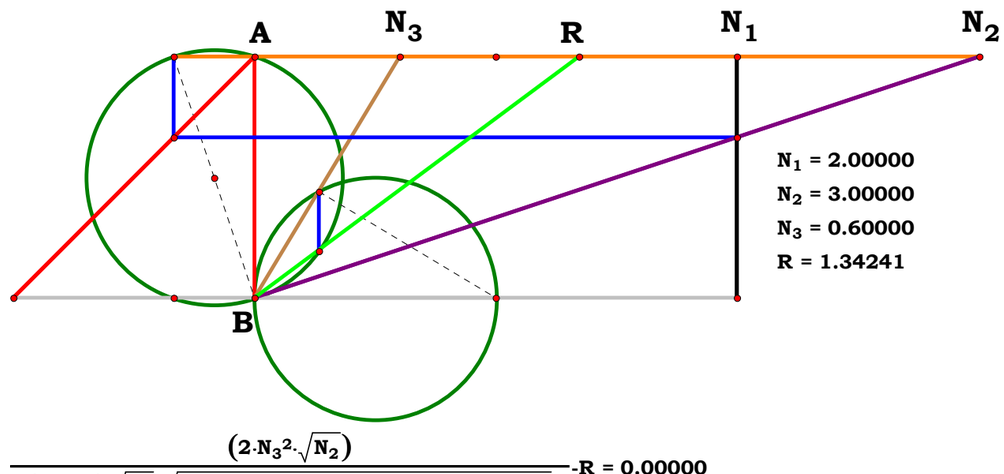
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $BO := \frac{N_3^2}{N_3^2 + 1}$

$HK := AF + BO$ $GH := \sqrt{GK^2 - HK^2}$

$KO := GK - (GH + EF)$ $R := \frac{BO}{KO}$

$R = 0.957918$



$\frac{(2 \cdot N_3^2 \cdot \sqrt{N_2})}{(N_3^2+1) \cdot \sqrt{N_2 - \sqrt{(N_2 - 2 \cdot N_3^2 \cdot (N_2 - 2 \cdot N_1)) + N_3^4 \cdot (4 \cdot N_1 - 7 \cdot N_2)}}} - R = 0.00000$

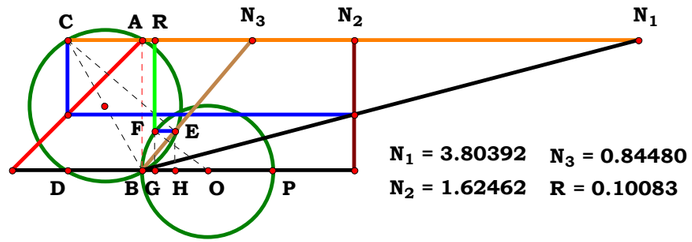
Definitions.

$$R - \frac{2 \cdot \sqrt{N_2} \cdot N_3^2}{\sqrt{N_2} \cdot \left(N_3^2 + 1\right) - \sqrt{N_2 - 2 \cdot N_3^2 \cdot \left(N_2 - 2 \cdot N_1\right) + N_3^4 \cdot \left(4 \cdot N_1 - 7 \cdot N_2\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{2 \cdot \left(\sqrt{N_u}\right)^5 \cdot \sqrt{A \cdot B}}{\sqrt{A \cdot B} \cdot \sqrt{N_u} \cdot \left(C^2 + N_u^2\right) - \sqrt{B} \cdot \sqrt{-N_u \cdot \left[N_u^4 \cdot (7 \cdot A - 4 \cdot B) - A \cdot C^4 + 2 \cdot C^2 \cdot N_u^2 \cdot (A - 2 \cdot B)\right]}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{2 \cdot \sqrt{Y} \cdot Z^2 \cdot \sqrt{o \cdot p}}{\sqrt{o \cdot p} \cdot \sqrt{Y} \cdot \left(Z^2 + q^2\right) - \sqrt{p} \cdot \sqrt{4 \cdot X \cdot Z^2 \cdot p \cdot \left(Z^2 + q^2\right) - Y \cdot o \cdot \left(7 \cdot Z^4 + 2 \cdot Z^2 \cdot q^2 - q^4\right)}} = 0$$

4RST10BAB1R0



Unit. $AB := 1$ Given. $N_1 := 3.80392$ $N_2 := 1.62462$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

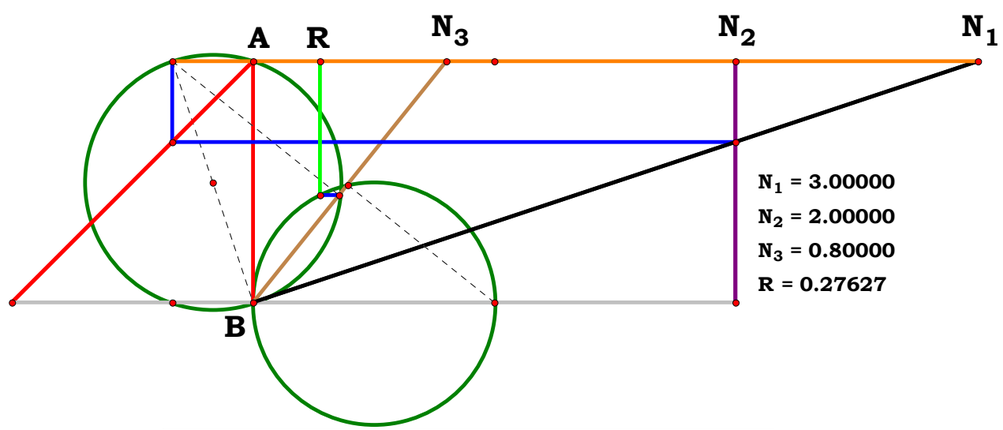
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO - GO$ $R = 0.100834$



$\frac{N_1 \cdot (N_3^2+1) - \sqrt{(2 \cdot N_1 \cdot N_3 - N_1 \cdot N_3^2 - 3 \cdot N_1 - 2 \cdot N_2 \cdot N_3) \cdot ((N_1 - N_1 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3) + 2 \cdot N_2 \cdot N_3)}}{2 \cdot N_1 \cdot (N_3^2+1)} - R = 0.00000$

Definitions.

$$R - \frac{\sqrt{\left(N_3^2 + 1\right)^2} - \sqrt{N_3^2 \cdot \left(N_3^2 + 2\right) - 4 \cdot AC \cdot N_3 \cdot \left(AC \cdot N_3 - 2\right) - 3}}{2 \cdot \sqrt{N_3^4 + 2 \cdot N_3^2 + 1}} = 0$$

$$R - \frac{N_1 \cdot \left(N_3^2 + 1\right) - \sqrt{\left(2 \cdot N_1 \cdot N_3 - N_1 \cdot N_3^2 - 3 \cdot N_1 - 2 \cdot N_2 \cdot N_3\right) \cdot \left(N_1 - N_1 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 2 \cdot N_2 \cdot N_3\right)}}{2 \cdot N_1 \cdot \left(N_3^2 + 1\right)} = 0$$

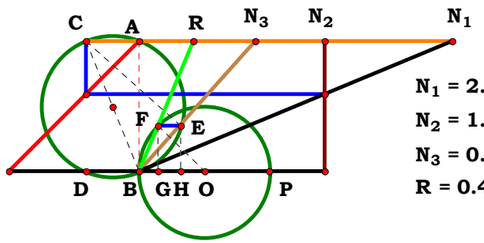
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{B \cdot \left(C^2 + N_u^2\right) - \sqrt{\left(B \cdot N_u^2 - B \cdot C^2 - 2 \cdot A \cdot C \cdot N_u + 2 \cdot B \cdot C \cdot N_u\right) \cdot \left(3 \cdot B \cdot C^2 + B \cdot N_u^2 + 2 \cdot A \cdot C \cdot N_u - 2 \cdot B \cdot C \cdot N_u\right)}}{2 \cdot \left(C^2 + N_u^2\right) \cdot B} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{X \cdot p \cdot \left(Z^2 + q^2\right) - \sqrt{[X \cdot p \cdot (Z - q) \cdot (Z + q) + 2 \cdot Z \cdot q \cdot (X \cdot p - Y \cdot o)] \cdot \left(X \cdot Z^2 \cdot p + 3 \cdot X \cdot p \cdot q^2 - 2 \cdot X \cdot Z \cdot p \cdot q + 2 \cdot Y \cdot Z \cdot o \cdot q\right)}}{2 \cdot X \cdot \left(Z^2 + q^2\right) \cdot p} = 0$$

4RST10BAB1R1



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.89323$
$R = 0.41439$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

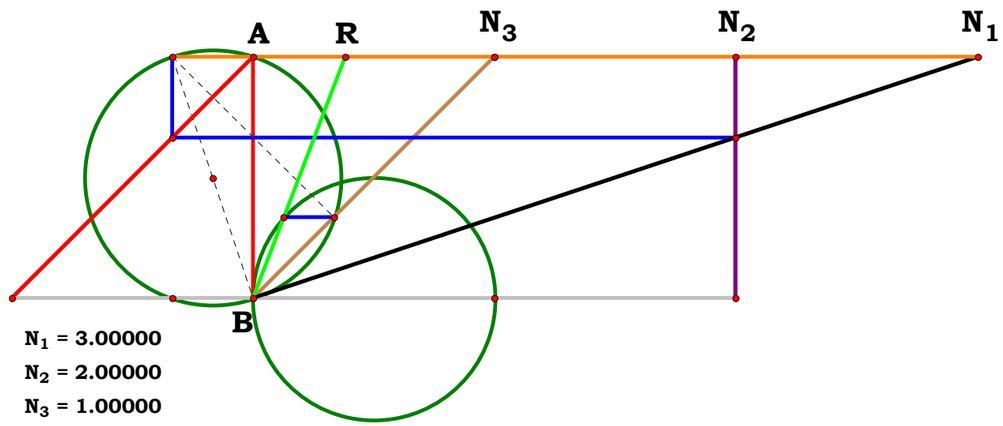
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$BG := FO - GO$ $R := \frac{BG}{EH}$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.38197$

$R = 0.414392$

$$\frac{N_1\cdot(N_3^2+1)-\sqrt{(((3\cdot N_1+N_1\cdot N_3^2)-2\cdot N_1\cdot N_3)+2\cdot N_2\cdot N_3)\cdot(((N_1\cdot N_3^2-N_1)+2\cdot N_1\cdot N_3)-2\cdot N_2\cdot N_3)}}{(2\cdot((N_1-N_1\cdot N_3)+N_2\cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{N_3^4 - 4\cdot AC\cdot N_3\cdot(AC\cdot N_3 - 2) + 2\cdot N_3^2 - 3} - \sqrt{\left(N_3^2+1\right)^2}\right]\cdot\left(N_3^2+1\right)}{2\cdot\sqrt{\left(N_3^2+1\right)^2}\cdot(AC\cdot N_3 - 1)} = 0$$

$$R - \frac{N_1\cdot\left(N_3^2+1\right) - \sqrt{\left(3\cdot N_1 + N_1\cdot N_3^2 - 2\cdot N_1\cdot N_3 + 2\cdot N_2\cdot N_3\right)\cdot\left(N_1\cdot N_3^2 - N_1 + 2\cdot N_1\cdot N_3 - 2\cdot N_2\cdot N_3\right)}}{2\cdot\left(N_1 - N_1\cdot N_3 + N_2\cdot N_3\right)} = 0$$

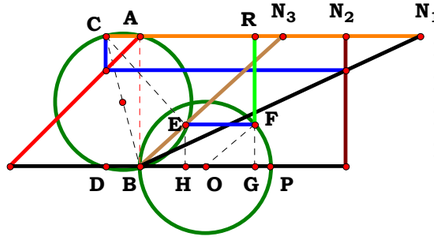
$$R - \frac{B\cdot\left(C^2+N_u^2\right) - \sqrt{\left(B\cdot N_u^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)}}{2\cdot C\cdot\left(B\cdot C + A\cdot N_u - B\cdot N_u\right)} = 0$$

$$R - \frac{\sqrt{X^2\cdot p^2\cdot\left(Z^2 - 2\cdot Z\cdot q + 3\cdot q^2\right)\cdot\left(Z^2 + 2\cdot Z\cdot q - q^2\right) + 8\cdot X\cdot Y\cdot Z\cdot o\cdot p\cdot q^2\cdot(Z-q) - 4\cdot Y^2\cdot Z^2\cdot o^2\cdot q^2} - X\cdot p\cdot\left(Z^2+q^2\right)}{2\cdot q\cdot(X\cdot Z\cdot p - Y\cdot Z\cdot o - X\cdot p\cdot q)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

4RST10BAB1R2



$N_1 = 2.14765$

$N_2 = 1.57619$

$N_3 = 1.09663$

$R = 0.88291$

Unit. $AB := 1$ Given. $N_1 := 2.14765$ $N_2 := 1.57619$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

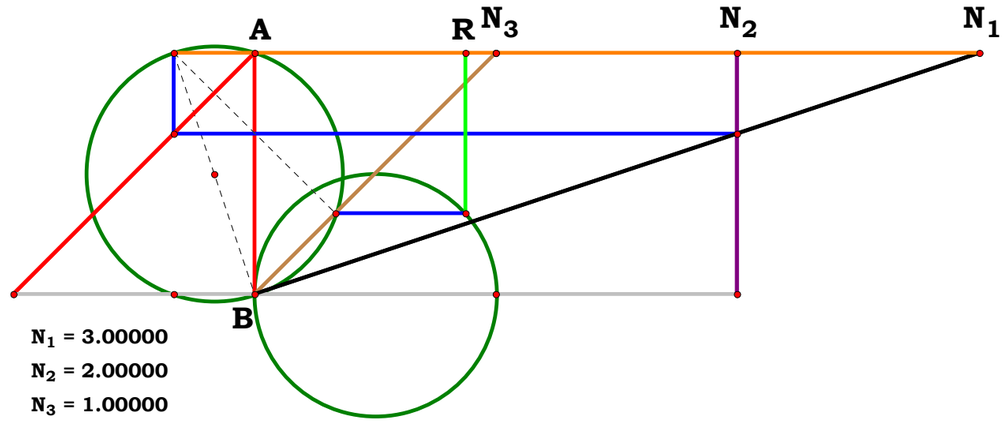
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO + GO$ $R = 0.882908$



$N_1 = 3.00000$

$N_2 = 2.00000$

$N_3 = 1.00000$

$R = 0.87268$

$$\frac{N_1 \cdot (N_3^2+1) + \sqrt{(((3 \cdot N_1 + N_1 \cdot N_3^2) - 2 \cdot N_1 \cdot N_3) + 2 \cdot N_2 \cdot N_3) \cdot (((N_1 \cdot N_3^2 - N_1) + 2 \cdot N_1 \cdot N_3) - 2 \cdot N_2 \cdot N_3)}}{2 \cdot N_1 \cdot (N_3^2+1)} - R = 0.00000$$

Definitions.

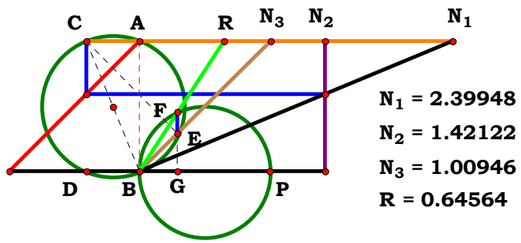
$$R - \frac{\sqrt{8 \cdot AC \cdot N_3 - 4 \cdot AC^2 \cdot N_3^2 + N_3^4 + 2 \cdot N_3^2 - 3} + \sqrt{\left(N_3^2 + 1\right)^2}}{2 \cdot \sqrt{\left(N_3^2 + 1\right)^2}} = 0$$

$$R - \frac{N_1 + N_1 \cdot N_3^2 + \sqrt{\left(3 \cdot N_1 + N_1 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 2 \cdot N_2 \cdot N_3\right) \cdot \left(N_1 \cdot N_3^2 - N_1 + 2 \cdot N_1 \cdot N_3 - 2 \cdot N_2 \cdot N_3\right)}}{2 \cdot N_1 \cdot \left(N_3^2 + 1\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{\left(B \cdot N_u^2 - B \cdot C^2 - 2 \cdot A \cdot C \cdot N_u + 2 \cdot B \cdot C \cdot N_u\right) \cdot \left(3 \cdot B \cdot C^2 + B \cdot N_u^2 + 2 \cdot A \cdot C \cdot N_u - 2 \cdot B \cdot C \cdot N_u\right)} + B \cdot \left(C^2 + N_u^2\right)}{2 \cdot \left(C^2 + N_u^2\right) \cdot B} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{\left(X \cdot Z^2 \cdot p - X \cdot p \cdot q^2 + 2 \cdot X \cdot Z \cdot p \cdot q - 2 \cdot Y \cdot Z \cdot o \cdot q\right) \cdot \left(X \cdot Z^2 \cdot p + 3 \cdot X \cdot p \cdot q^2 - 2 \cdot X \cdot Z \cdot p \cdot q + 2 \cdot Y \cdot Z \cdot o \cdot q\right)} + X \cdot p \cdot \left(Z^2 + q^2\right)}{2 \cdot X \cdot \left(Z^2 + q^2\right) \cdot p} = 0$$

4RST10BAB1R3



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.00946$
$R = 0.64564$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.00946$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

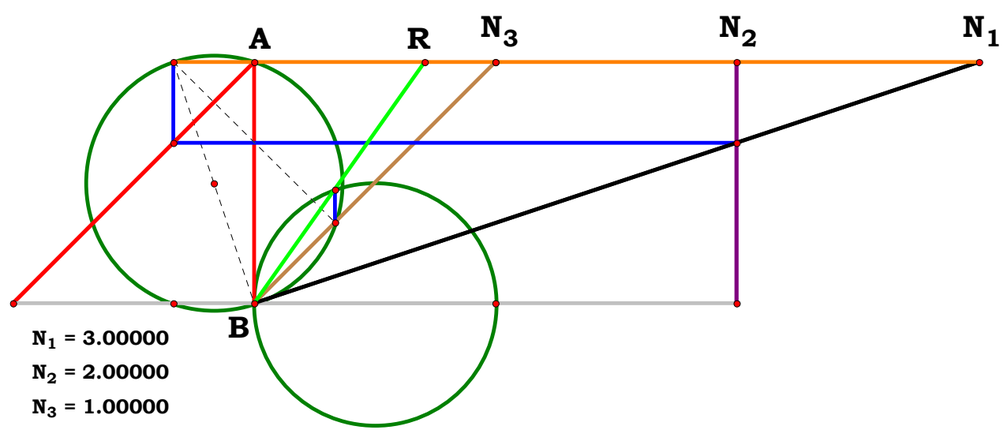
$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $BG := \frac{N_3 \cdot BE}{BN_3}$

$BP := AB$ $FG := \sqrt{BG \cdot (BP - BG)}$

$R := \frac{BG}{FG}$ $R = 0.645641$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.70711$

$\frac{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3)}{\sqrt{N_3 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3) \cdot ((N_1 + 2 \cdot N_1 \cdot N_3^2) - N_2 \cdot N_3^2 - N_1 \cdot N_3)}} - R = 0.00000$

Definitions.

$$R - \frac{N_3 \cdot \sqrt{\left(N_3^2 + 1\right)^2} \cdot \left(1 - AC \cdot N_3\right)}{\left(N_3^2 + 1\right) \cdot \sqrt{-N_3 \cdot \left(AC \cdot N_3 - 1\right) \cdot \left(N_3^2 - N_3 + AC \cdot N_3^2 + 1\right)}} = 0$$

$$R - \frac{N_3 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)}{\sqrt{N_3 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right) \cdot \left(N_1 + 2 \cdot N_1 \cdot N_3^2 - N_2 \cdot N_3^2 - N_1 \cdot N_3\right)}} = 0$$

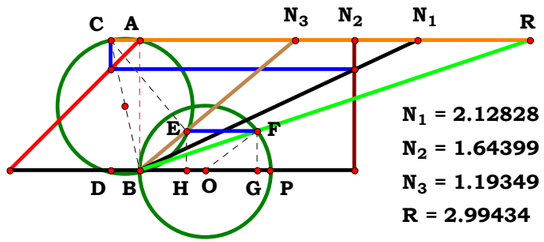
$$R - \frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{N_u \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right) \cdot \left[B \cdot C^2 - N_u^2 \cdot (A - 2 \cdot B) - B \cdot C \cdot N_u\right]}} = 0$$

$$R - \frac{Z \cdot (Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q)}{\sqrt{Z \cdot (X \cdot Z \cdot p - Y \cdot Z \cdot o - X \cdot p \cdot q) \cdot \left(Y \cdot Z^2 \cdot o - 2 \cdot X \cdot Z^2 \cdot p - X \cdot p \cdot q^2 + X \cdot Z \cdot p \cdot q\right)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

4RST10BAB1R4



$N_1 = 2.12828$
$N_2 = 1.64399$
$N_3 = 1.19349$
$R = 2.99434$

Unit. $AB := 1$ Given. $N_1 := 2.12828$ $N_2 := 1.64399$ $N_3 := 1.19349$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

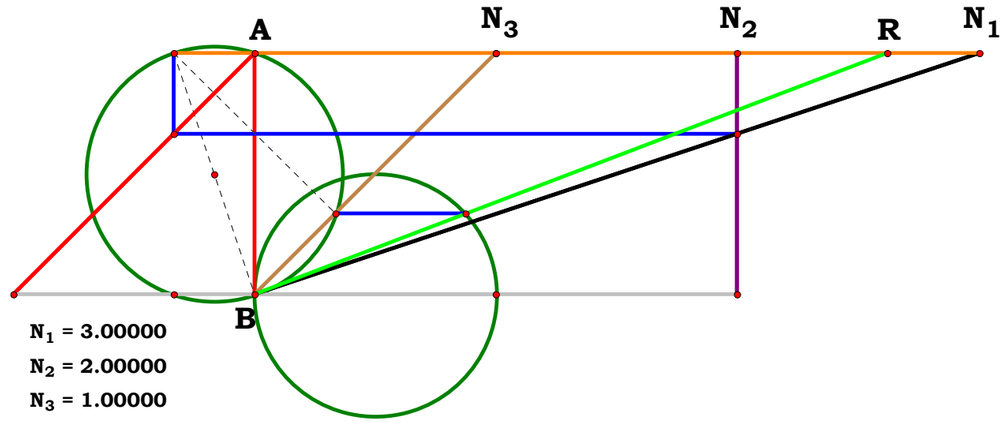
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $FG := \frac{BE}{BN_3}$

$BP := AB$ $OF := \frac{BP}{2}$

$GO := \sqrt{OF^2 - FG^2}$ $BG := OF + GO$

$R := \frac{BG}{FG}$ $R = 2.994357$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 2.61803$

$$\frac{N_1 \cdot (N_3^2+1) + \sqrt{(((3 \cdot N_1 + N_1 \cdot N_3^2) - 2 \cdot N_1 \cdot N_3) + 2 \cdot N_2 \cdot N_3) \cdot (((N_1 \cdot N_3^2 - N_1) + 2 \cdot N_1 \cdot N_3) - 2 \cdot N_2 \cdot N_3)}}{(2 \cdot ((N_1 - N_1 \cdot N_3) + N_2 \cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{\left[\sqrt{8 \cdot AC \cdot N_3 - 4 \cdot AC^2 \cdot N_3^2 + N_3^4 + 2 \cdot N_3^2 - 3} + \sqrt{\left(N_3^2 + 1\right)^2}\right] \cdot \left(N_3^2 + 1\right)}{2 \cdot \sqrt{\left(N_3^2 + 1\right)^2} \cdot (1 - AC \cdot N_3)} = 0$$

$$R - \frac{N_1 \cdot \left(N_3^2 + 1\right) + \sqrt{\left(3 \cdot N_1 + N_1 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 2 \cdot N_2 \cdot N_3\right) \cdot \left(N_1 \cdot N_3^2 - N_1 + 2 \cdot N_1 \cdot N_3 - 2 \cdot N_2 \cdot N_3\right)}}{2 \cdot \left(N_1 - N_1 \cdot N_3 + N_2 \cdot N_3\right)} = 0$$

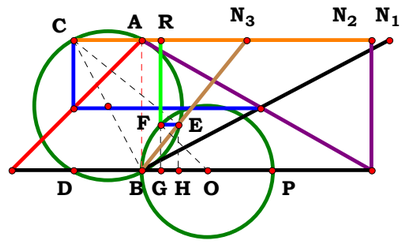
$$R - \frac{\sqrt{\left(B \cdot N_u^2 - B \cdot C^2 - 2 \cdot A \cdot C \cdot N_u + 2 \cdot B \cdot C \cdot N_u\right) \cdot \left(3 \cdot B \cdot C^2 + B \cdot N_u^2 + 2 \cdot A \cdot C \cdot N_u - 2 \cdot B \cdot C \cdot N_u\right)} + B \cdot \left(C^2 + N_u^2\right)}{2 \cdot C \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)} = 0$$

$$R - \frac{\sqrt{\left(X \cdot Z^2 \cdot p - X \cdot p \cdot q^2 + 2 \cdot X \cdot Z \cdot p \cdot q - 2 \cdot Y \cdot Z \cdot o \cdot q\right) \cdot \left(X \cdot Z^2 \cdot p + 3 \cdot X \cdot p \cdot q^2 - 2 \cdot X \cdot Z \cdot p \cdot q + 2 \cdot Y \cdot Z \cdot o \cdot q\right)} + X \cdot p \cdot \left(Z^2 + q^2\right)}{2 \cdot q \cdot (Y \cdot Z \cdot o - X \cdot Z \cdot p + X \cdot p \cdot q)} = 0$$

$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

4RST10BAB3R0



$N_1 = 1.89582$
$N_2 = 1.76022$
$N_3 = 0.80606$
$R = 0.14570$

Unit. $AB := 1$ Given. $N_1 := 1.89582$ $N_2 := 1.76022$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

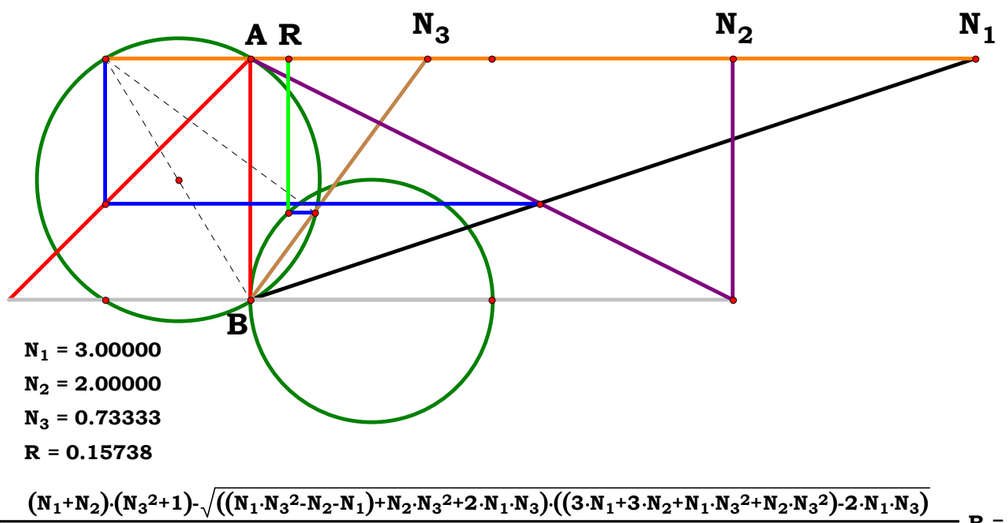
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO - GO$ $R = 0.145693$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.73333$
$R = 0.15738$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_1\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_1\cdot N_3)}}{2\cdot(N_1+N_2)\cdot(N_3^2+1)} - R = 0.00000$$

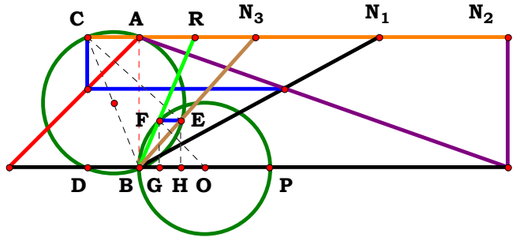
Definitions.

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_1\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_1\cdot N_3)}}{2\cdot(N_3^2+1)\cdot(N_1+N_2)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{(C^2+N_u^2)\cdot(A+B)-\sqrt{(A\cdot N_u^2-B\cdot C^2-A\cdot C^2+B\cdot N_u^2+2\cdot B\cdot C\cdot N_u)\cdot(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^2+B\cdot N_u^2-2\cdot B\cdot C\cdot N_u)}}{2\cdot(C^2+N_u^2)\cdot(A+B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_1\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_1\cdot N_3)}}{2\cdot(N_3^2+1)\cdot(N_1+N_2)} = 0$$

4RST10BAB3R1



$N_1 = 1.83771$
$N_2 = 2.82566$
$N_3 = 0.89323$
$R = 0.42577$

Unit. $AB := 1$ **Given.** $N_1 := 1.83771$ $N_2 := 2.82566$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

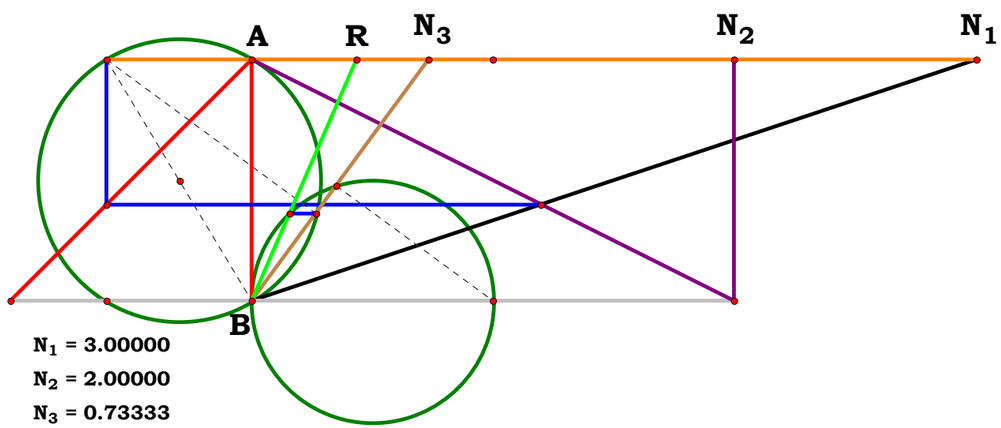
$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$BG := FO - GO$ $R := \frac{BG}{EH}$

$R = 0.425767$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.73333$
$R = 0.43218$

$\frac{\sqrt{((N_1 \cdot N_3^2 - N_2 - N_1) + N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) \cdot ((3 \cdot N_1 + 3 \cdot N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2) - 2 \cdot N_1 \cdot N_3)} - (N_3^2 + 1) \cdot (N_1 + N_2)}{(2 \cdot (N_1 \cdot N_3 - N_2 - N_1))} - R = 0.00000$

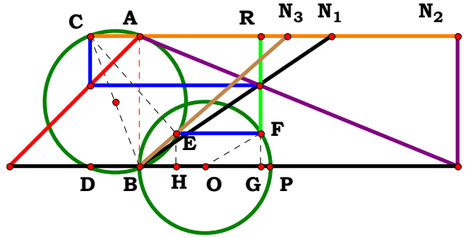
Definitions.

$$R - \frac{\sqrt{\left(N_1 \cdot N_3^2 - N_2 - N_1 + N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3\right) \cdot \left(3 \cdot N_1 + 3 \cdot N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3\right)} - \left(N_3^2 + 1\right) \cdot \left(N_1 + N_2\right)}{2 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\left(C^2 + N_u^2\right) \cdot (A + B) - \sqrt{\left(A \cdot N_u^2 - B \cdot C^2 - A \cdot C^2 + B \cdot N_u^2 + 2 \cdot B \cdot C \cdot N_u\right) \cdot \left(3 \cdot A \cdot C^2 + 3 \cdot B \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - 2 \cdot B \cdot C \cdot N_u\right)}}{2 \cdot C \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Z^4 \cdot (X \cdot p + Y \cdot o)^2 + 2 \cdot Z^2 \cdot q^2 \cdot \left(2 \cdot X \cdot Y \cdot o \cdot p - X^2 \cdot p^2 + Y^2 \cdot o^2\right) + 8 \cdot Z \cdot X \cdot p \cdot q^3 \cdot (X \cdot p + Y \cdot o) - 3 \cdot q^4 \cdot (X \cdot p + Y \cdot o)^2} - \left(Z^2 + q^2\right) \cdot (X \cdot p + Y \cdot o)}{2 \cdot q \cdot (X \cdot Z \cdot p - X \cdot p \cdot q - Y \cdot o \cdot q)} = 0$$

4RST10BAB3R2



$N_1 = 1.46965$
$N_2 = 2.43822$
$N_3 = 1.13537$
$R = 0.93282$

Unit. $AB := 1$ Given. $N_1 := 1.46965$ $N_2 := 2.43822$ $N_3 := 1.13537$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

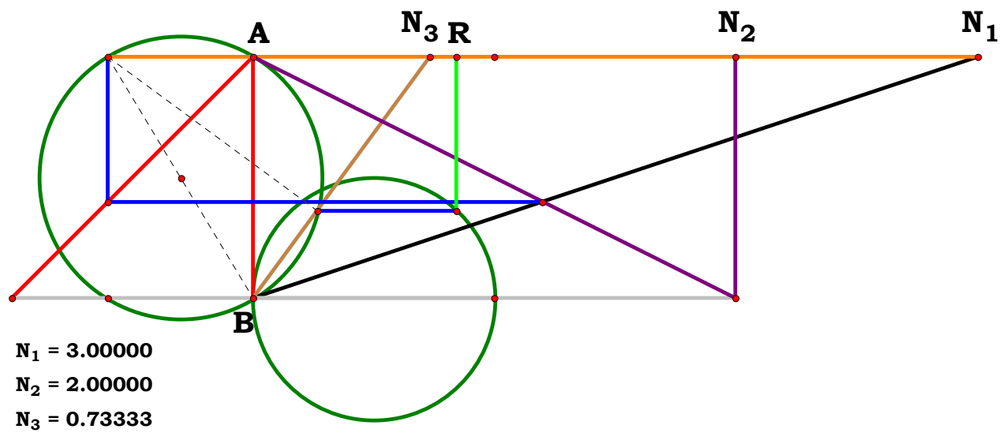
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO + GO$ $R = 0.932823$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.73333$
$R = 0.84262$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_1\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_1\cdot N_3)}}{2\cdot(N_1+N_2)\cdot(N_3^2+1)} - R = 0.00000$$

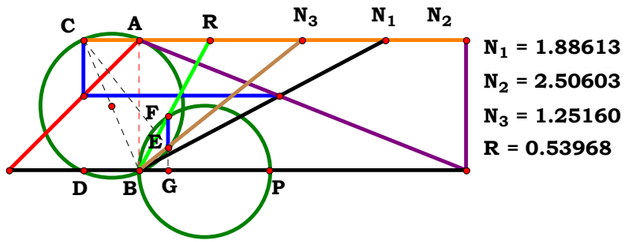
Definitions.

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_1\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_1\cdot N_3)}}{2\cdot(N_1+N_2)\cdot(N_3^2+1)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{(A\cdot N_u^2-B\cdot C^2-A\cdot C^2+B\cdot N_u^2+2\cdot B\cdot C\cdot N_u)\cdot(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^2+B\cdot N_u^2-2\cdot B\cdot C\cdot N_u)}+(C^2+N_u^2)\cdot(A+B)}{2\cdot(C^2+N_u^2)\cdot(A+B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o-X\cdot p\cdot q^2-Y\cdot o\cdot q^2+2\cdot X\cdot Z\cdot p\cdot q)\cdot(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o+3\cdot X\cdot p\cdot q^2+3\cdot Y\cdot o\cdot q^2-2\cdot X\cdot Z\cdot p\cdot q)}+(Z^2+q^2)\cdot(X\cdot p+Y\cdot o)}{2\cdot(X\cdot p+Y\cdot o)\cdot(Z^2+q^2)} = 0$$

4RST10BAB3R3



$N_1 = 1.88613$
$N_2 = 2.50603$
$N_3 = 1.25160$
$R = 0.53968$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := 2.50603$ $N_3 := 1.25160$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

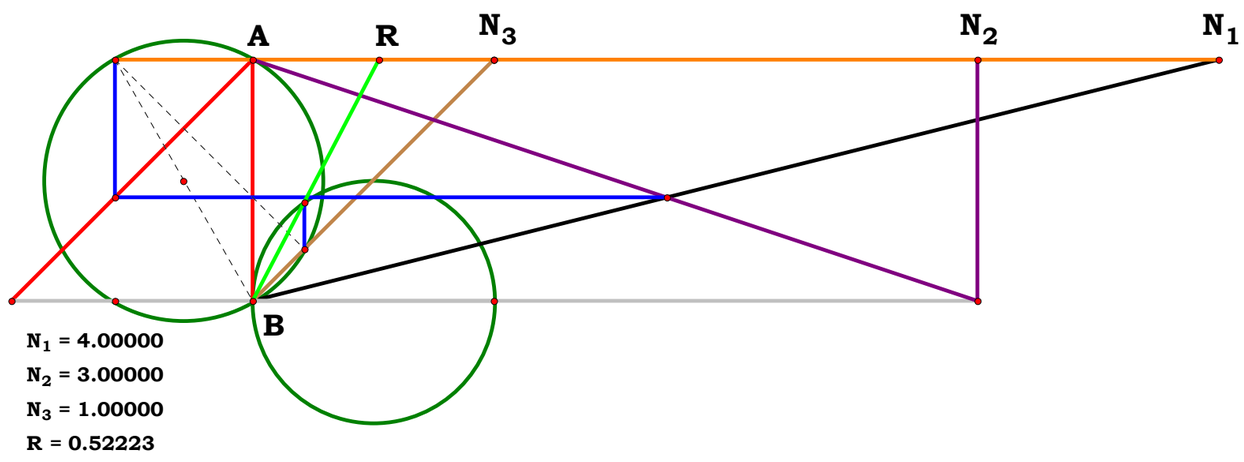
$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $BG := \frac{N_3 \cdot BE}{BN_3}$

$BP := AB$ $FG := \sqrt{BG \cdot (BP - BG)}$

$R := \frac{BG}{FG}$ $R = 0.539678$



$N_1 = 4.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R = 0.52223$

$$\frac{(N_3 \cdot ((N_1+N_2)-N_1 \cdot N_3))}{\sqrt{(N_3 \cdot ((N_1+N_2)-N_1 \cdot N_3)) \cdot ((N_1+N_2+2 \cdot N_1 \cdot N_3^2+N_2 \cdot N_3^2)-N_1 \cdot N_3-N_2 \cdot N_3)}} - R = 0.00000$$

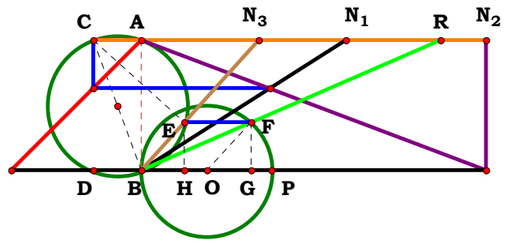
Definitions.

$$R - \frac{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3)}{\sqrt{N_3 \cdot (N_1 + N_2 - N_1 \cdot N_3) \cdot (N_1 + N_2 + 2 \cdot N_1 \cdot N_3^2 + N_2 \cdot N_3^2 - N_1 \cdot N_3 - N_2 \cdot N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + A \cdot N_u^2 + 2 \cdot B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q)}{\sqrt{Z \cdot (X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q) \cdot [2 \cdot X \cdot Z^2 \cdot p + Y \cdot Z^2 \cdot o + X \cdot p \cdot q^2 + Y \cdot o \cdot q^2 - Z \cdot q \cdot (X \cdot p + Y \cdot o)]}} = 0$$

4RST10BAB3R4



$N_1 = 1.56650$
$N_2 = 2.64163$
$N_3 = 0.90291$
$R = 2.29939$

Unit. $AB := 1$ **Given.** $N_1 := 1.56650$ $N_2 := 2.64163$ $N_3 := .90291$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

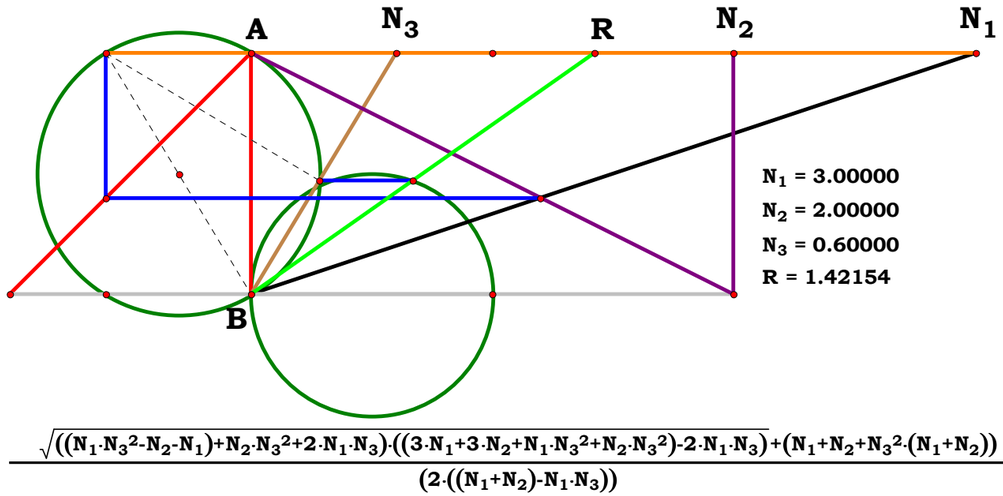
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $FG := \frac{BE}{BN_3}$

$BP := AB$ $OF := \frac{BP}{2}$

$GO := \sqrt{OF^2 - FG^2}$ $BG := OF + GO$

$R := \frac{BG}{FG}$ $R = 2.29937$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.60000$
$R = 1.42154$

$$\frac{\sqrt{((N_1 \cdot N_3^2 - N_2 - N_1) + N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) \cdot ((3 \cdot N_1 + 3 \cdot N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2) - 2 \cdot N_1 \cdot N_3)} + (N_1 + N_2 + N_3^2 \cdot (N_1 + N_2))}{(2 \cdot ((N_1 + N_2) - N_1 \cdot N_3))} - R = 0.00000$$

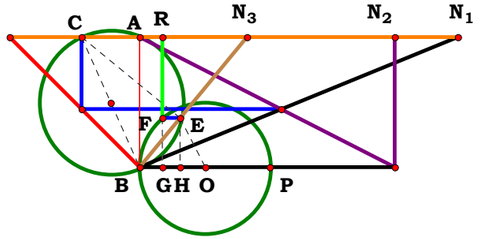
Definitions.

$$R - \frac{\sqrt{\left(N_1 \cdot N_3^2 - N_2 - N_1 + N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3\right) \cdot \left(3 \cdot N_1 + 3 \cdot N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3\right)} + N_1 + N_2 + N_3^2 \cdot \left(N_1 + N_2\right)}{2 \cdot \left(N_1 + N_2 - N_1 \cdot N_3\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{\left(A \cdot N_u^2 - B \cdot C^2 - A \cdot C^2 + B \cdot N_u^2 + 2 \cdot B \cdot C \cdot N_u\right) \cdot \left(3 \cdot A \cdot C^2 + 3 \cdot B \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - 2 \cdot B \cdot C \cdot N_u\right)} + \left(C^2 + N_u^2\right) \cdot (A + B)}{2 \cdot C \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{\left(X \cdot Z^2 \cdot p + Y \cdot Z^2 \cdot o - X \cdot p \cdot q^2 - Y \cdot o \cdot q^2 + 2 \cdot X \cdot Z \cdot p \cdot q\right) \cdot \left(X \cdot Z^2 \cdot p + Y \cdot Z^2 \cdot o + 3 \cdot X \cdot p \cdot q^2 + 3 \cdot Y \cdot o \cdot q^2 - 2 \cdot X \cdot Z \cdot p \cdot q\right)} + \left(Z^2 + q^2\right) \cdot (X \cdot p + Y \cdot o)}{2 \cdot q \cdot (X \cdot p \cdot q - X \cdot Z \cdot p + Y \cdot o \cdot q)} = 0$$

4RST10BAB4R0



$N_1 = 2.43822$

$N_2 = 1.95394$

$N_3 = 0.82543$

$R = 0.17083$

Unit. $AB := 1$ Given. $N_1 := 2.43822$ $N_2 := 1.95394$ $N_3 := .82543$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

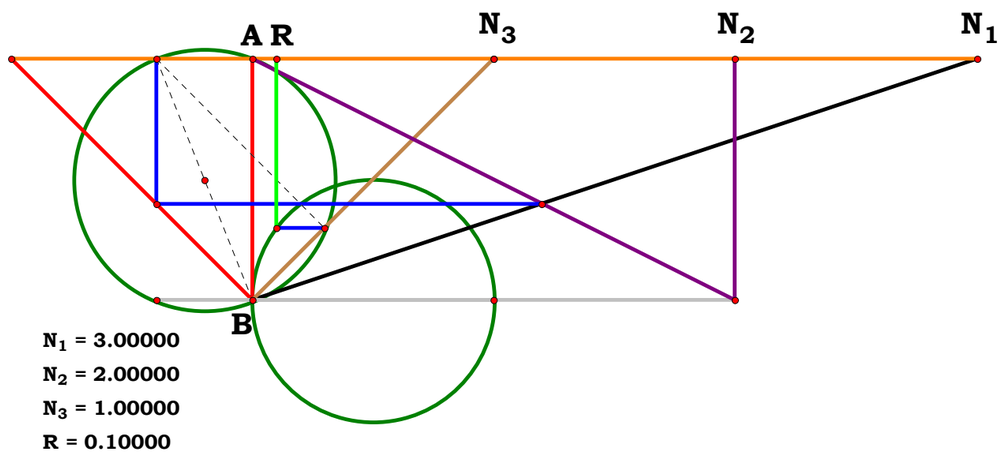
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO - GO$ $R = 0.170832$



$N_1 = 3.00000$

$N_2 = 2.00000$

$N_3 = 1.00000$

$R = 0.10000$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_2\cdot N_3)}}{2\cdot(N_1+N_2)\cdot(N_3^2+1)} - R = 0.00000$$

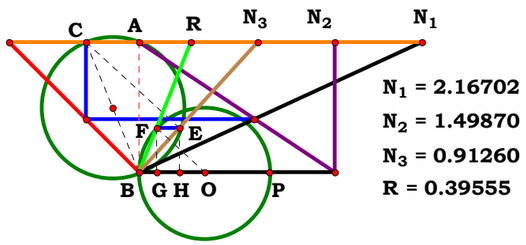
Definitions.

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_2\cdot N_3)}}{2\cdot(N_3^2+1)\cdot(N_1+N_2)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{(C^2+N_u^2)\cdot(A+B)-\sqrt{(A\cdot N_u^2-B\cdot C^2-A\cdot C^2+B\cdot N_u^2+2\cdot A\cdot C\cdot N_u)\cdot(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^2+B\cdot N_u^2-2\cdot A\cdot C\cdot N_u)}}{2\cdot(C^2+N_u^2)\cdot(A+B)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{(Z^2+q^2)\cdot(X\cdot p+Y\cdot o)-\sqrt{(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o-X\cdot p\cdot q^2-Y\cdot o\cdot q^2+2\cdot Y\cdot Z\cdot o\cdot q)\cdot(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o+3\cdot X\cdot p\cdot q^2+3\cdot Y\cdot o\cdot q^2-2\cdot Y\cdot Z\cdot o\cdot q)}}{2\cdot(X\cdot p+Y\cdot o)\cdot(Z^2+q^2)} = 0$$

4RST10BAB4R1



$N_1 = 2.16702$
$N_2 = 1.49870$
$N_3 = 0.91260$
$R = 0.39555$

Unit. $AB := 1$ **Given.** $N_1 := 2.16702$ $N_2 := 1.49870$ $N_3 := .91260$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

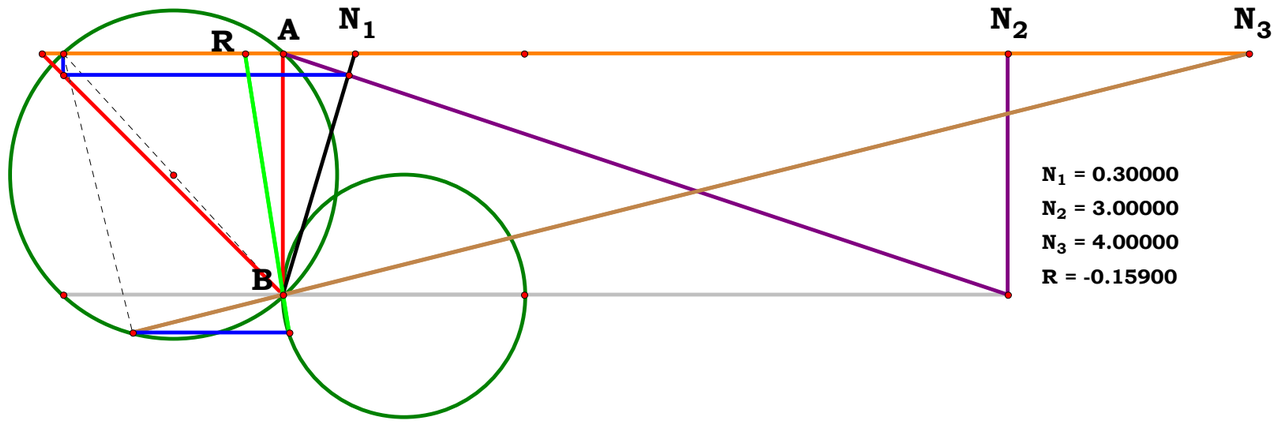
$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$BG := FO - GO$ $R := \frac{BG}{EH}$

$R = 0.395546$



$N_1 = 0.30000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = -0.15900$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)-\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_2\cdot N_3)}}{2\cdot((N_1+N_2)-N_2\cdot N_3)} - R = 0.00000$$

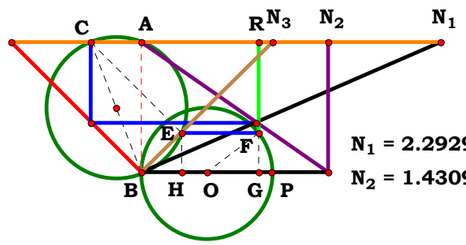
Definitions.

$$R - \frac{\left(N_3^2+1\right)\cdot\left(N_1+N_2\right)-\sqrt{\left(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_2\cdot N_3\right)\cdot\left(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_2\cdot N_3\right)}}{2\cdot\left(N_1+N_2-N_2\cdot N_3\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\left(C^2+N_u^2\right)\cdot(A+B)-\sqrt{\left(A\cdot N_u^2-B\cdot C^2-A\cdot C^2+B\cdot N_u^2+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^2+B\cdot N_u^2-2\cdot A\cdot C\cdot N_u\right)}}{2\cdot C\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\left(Z^2+q^2\right)\cdot(X\cdot p+Y\cdot o)-\sqrt{\left(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o-X\cdot p\cdot q^2-Y\cdot o\cdot q^2+2\cdot Y\cdot Z\cdot o\cdot q\right)\cdot\left(X\cdot Z^2\cdot p+Y\cdot Z^2\cdot o+3\cdot X\cdot p\cdot q^2+3\cdot Y\cdot o\cdot q^2-2\cdot Y\cdot Z\cdot o\cdot q\right)}}{2\cdot q\cdot(X\cdot p\cdot q-Y\cdot Z\cdot o+Y\cdot o\cdot q)} = 0$$

4RST10BAB4R2



$N_1 = 2.29294$ $N_3 = 1.00946$
$N_2 = 1.43090$ $R = 0.89760$

Unit. $AB := 1$ Given. $N_1 := 2.29294$ $N_2 := 1.43090$ $N_3 := 1.00946$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

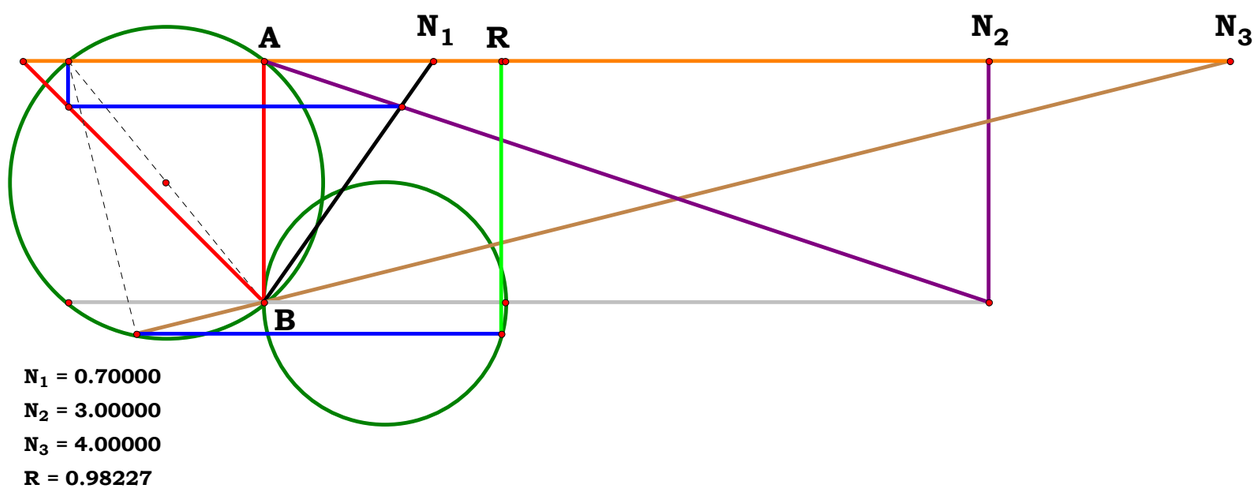
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO + GO$ $R = 0.8976$



$N_1 = 0.70000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$R = 0.98227$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_2\cdot N_3)}}{2\cdot(N_1+N_2)\cdot(N_3^2+1)} - R = 0.00000$$

Definitions.

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_2\cdot N_3)}}{2\cdot(N_3^2+1)\cdot(N_1+N_2)} = 0$$

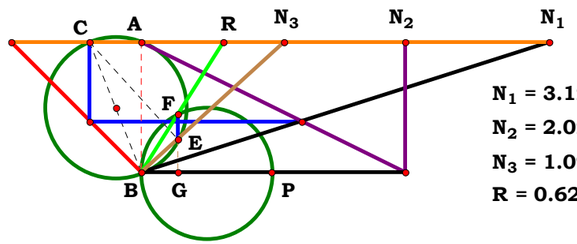
$$R - \frac{\sqrt{(A\cdot N_u^2-B\cdot C^2-A\cdot C^2+B\cdot N_u^2+2\cdot A\cdot C\cdot N_u)\cdot(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^2+B\cdot N_u^2-2\cdot A\cdot C\cdot N_u)}+(C^2+N_u^2)\cdot(A+B)}{2\cdot(C^2+N_u^2)\cdot(A+B)} = 0$$

$$R - \frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{(N_1\cdot N_3^2-N_2-N_1+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot(3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2-2\cdot N_2\cdot N_3)}}{2\cdot(N_3^2+1)\cdot(N_1+N_2)} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

4RST10BAB4R3



$N_1 = 3.12592$
$N_2 = 2.02174$
$N_3 = 1.09663$
$R = 0.62894$

Unit. $AB := 1$ Given. $N_1 := 3.12592$ $N_2 := 2.02174$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

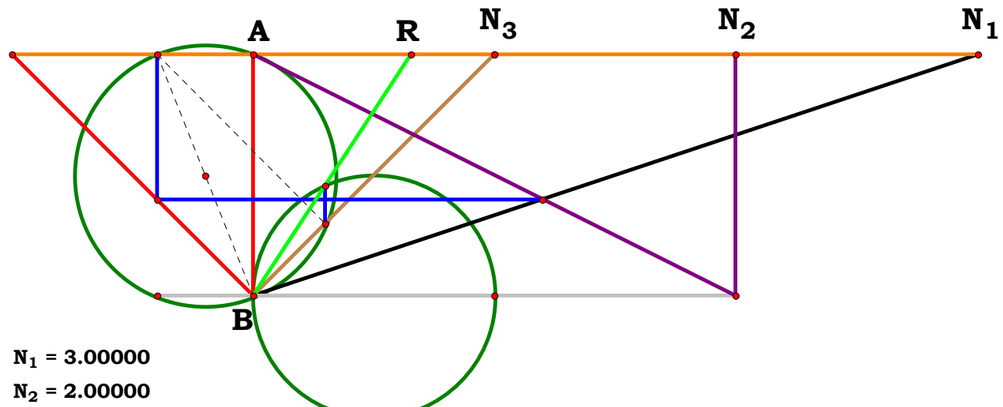
$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $BG := \frac{N_3 \cdot BE}{BN_3}$

$BP := AB$ $FG := \sqrt{BG \cdot (BP - BG)}$

$R := \frac{BG}{FG}$ $R = 0.628937$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$R = 0.65465$

$$\frac{(N_3 \cdot ((N_1 + N_2) - N_2 \cdot N_3))}{\sqrt{(N_3 \cdot ((N_1 + N_2) - N_2 \cdot N_3)) \cdot ((N_1 + N_2 + N_1 \cdot N_3^2 + 2 \cdot N_2 \cdot N_3^2) - N_1 \cdot N_3 - N_2 \cdot N_3)}} - R = 0.00000$$

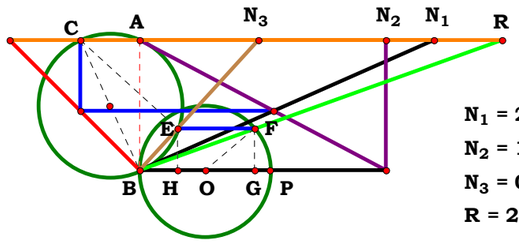
Definitions.

$$R - \frac{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3)}{\sqrt{N_3 \cdot (N_1 + N_2 - N_2 \cdot N_3) \cdot (N_1 + N_2 + N_1 \cdot N_3^2 + 2 \cdot N_2 \cdot N_3^2 - N_1 \cdot N_3 - N_2 \cdot N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + 2 \cdot A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{Z \cdot (X \cdot p \cdot q - Y \cdot Z \cdot o + Y \cdot o \cdot q)}{\sqrt{Z \cdot (X \cdot p \cdot q - Y \cdot Z \cdot o + Y \cdot o \cdot q) \cdot (X \cdot Z^2 \cdot p + 2 \cdot Y \cdot Z^2 \cdot o + X \cdot p \cdot q^2 + Y \cdot o \cdot q^2 - X \cdot Z \cdot p \cdot q - Y \cdot Z \cdot o \cdot q)}} = 0$$

4RST10BAB4R4



$N_1 = 2.25419$
$N_2 = 1.88613$
$N_3 = 0.91260$
$R = 2.77689$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.88613$ $N_3 := .91260$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

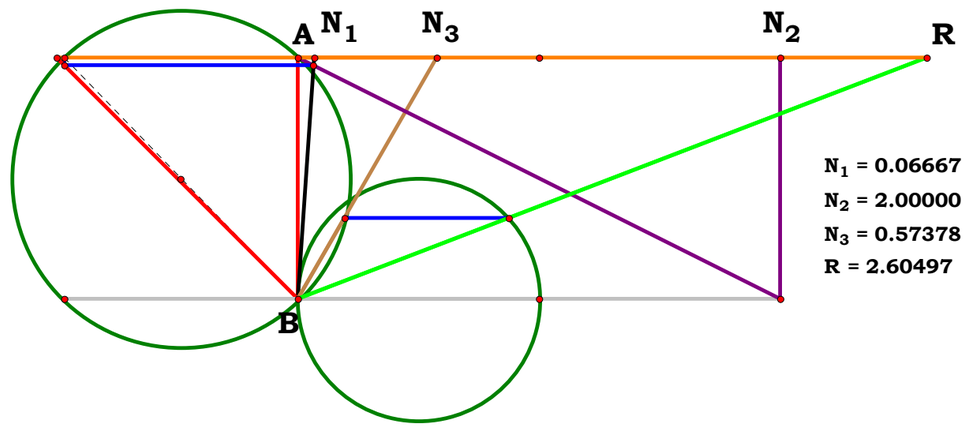
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $FG := \frac{BE}{BN_3}$

$BP := AB$ $OF := \frac{BP}{2}$ $GO := \sqrt{OF^2 - FG^2}$

$BG := OF + GO$ $R := \frac{BG}{FG}$

$R = 2.776892$



$N_1 = 0.06667$
$N_2 = 2.00000$
$N_3 = 0.57378$
$R = 2.60497$

$$\frac{(N_1+N_2)\cdot(N_3^2+1)+\sqrt{((N_1\cdot N_3^2-N_2-N_1)+N_2\cdot N_3^2+2\cdot N_2\cdot N_3)\cdot((3\cdot N_1+3\cdot N_2+N_1\cdot N_3^2+N_2\cdot N_3^2)-2\cdot N_2\cdot N_3)}}{(2\cdot((N_1+N_2)-N_2\cdot N_3))} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{\left(N_1\cdot N_3^2 - N_2 - N_1 + N_2\cdot N_3^2 + 2\cdot N_2\cdot N_3\right)\cdot\left(3\cdot N_1 + 3\cdot N_2 + N_1\cdot N_3^2 + N_2\cdot N_3^2 - 2\cdot N_2\cdot N_3\right)} + \left(N_3^2 + 1\right)\cdot\left(N_1 + N_2\right)}{2\cdot\left(N_1 + N_2 - N_2\cdot N_3\right)} = 0$$

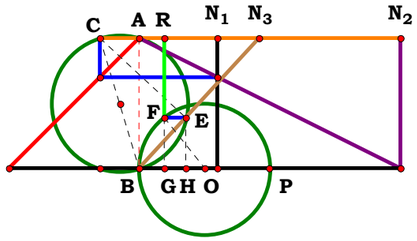
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A + B)}{2\cdot C\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{\left(X\cdot Z^2\cdot p + Y\cdot Z^2\cdot o - X\cdot p\cdot q^2 - Y\cdot o\cdot q^2 + 2\cdot Y\cdot Z\cdot o\cdot q\right)\cdot\left(X\cdot Z^2\cdot p + Y\cdot Z^2\cdot o + 3\cdot X\cdot p\cdot q^2 + 3\cdot Y\cdot o\cdot q^2 - 2\cdot Y\cdot Z\cdot o\cdot q\right)} + \left(Z^2 + q^2\right)\cdot(X\cdot p + Y\cdot o)}{2\cdot q\cdot(X\cdot p\cdot q - Y\cdot Z\cdot o + Y\cdot o\cdot q)} = 0$$

4RST10BAB5R0



$N_1 = 0.59793$
$N_2 = 2.00236$
$N_3 = 0.92228$
$R = 0.18905$

Unit. $AB := 1$ Given. $N_1 := .59793$ $N_2 := 2.00236$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

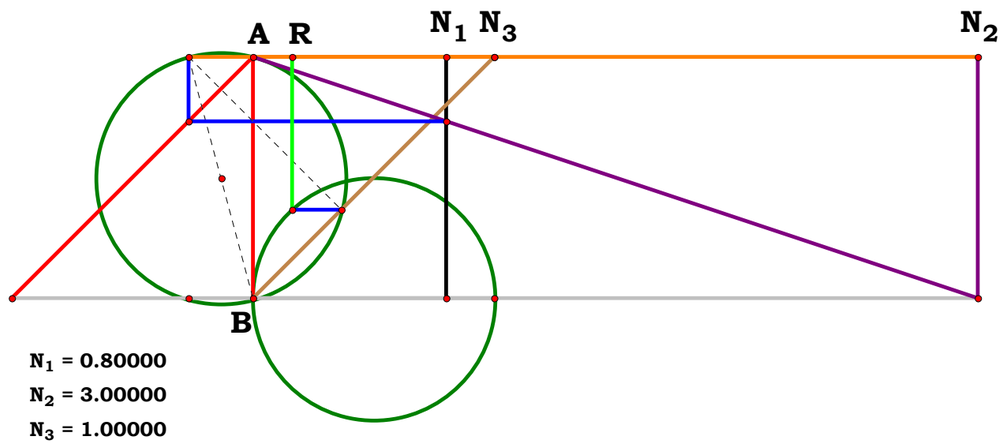
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO - GO$ $R = 0.189047$



$N_1 = 0.80000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R = 0.16007$

$\frac{N_2 \cdot (N_3^2+1) - \sqrt{((N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3) + 3 \cdot N_2) \cdot ((N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) - N_2)}}{2 \cdot N_2 \cdot (N_3^2+1)} - R = 0.00000$

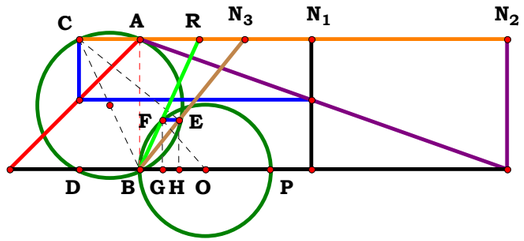
Definitions.

$R - \frac{N_2 \cdot (N_3^2 + 1) - \sqrt{(N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 3 \cdot N_2) \cdot (N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3 - N_2)}}{2 \cdot N_2 \cdot (N_3^2 + 1)} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{A \cdot (C^2 + N_u^2) - \sqrt{(2 \cdot B \cdot C \cdot N_u - 3 \cdot A \cdot C^2 - A \cdot N_u^2) \cdot (A \cdot C^2 - 2 \cdot B \cdot C \cdot N_u - A \cdot N_u^2)}}{2 \cdot (C^2 + N_u^2) \cdot A} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Y \cdot o \cdot (Z^2 + q^2) - \sqrt{(Y \cdot o \cdot Z^2 + 2 \cdot X \cdot p \cdot Z \cdot q - Y \cdot o \cdot q^2) \cdot (Y \cdot o \cdot Z^2 - 2 \cdot X \cdot p \cdot Z \cdot q + 3 \cdot Y \cdot o \cdot q^2)}}{2 \cdot Y \cdot (Z^2 + q^2) \cdot o} = 0$

4RST10BAB5R1



$N_1 = 1.31467$
$N_2 = 2.81597$
$N_3 = 0.80606$
$R = 0.45701$

Unit. $AB := 1$ **Given.** $N_1 := 1.31467$ $N_2 := 2.81597$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

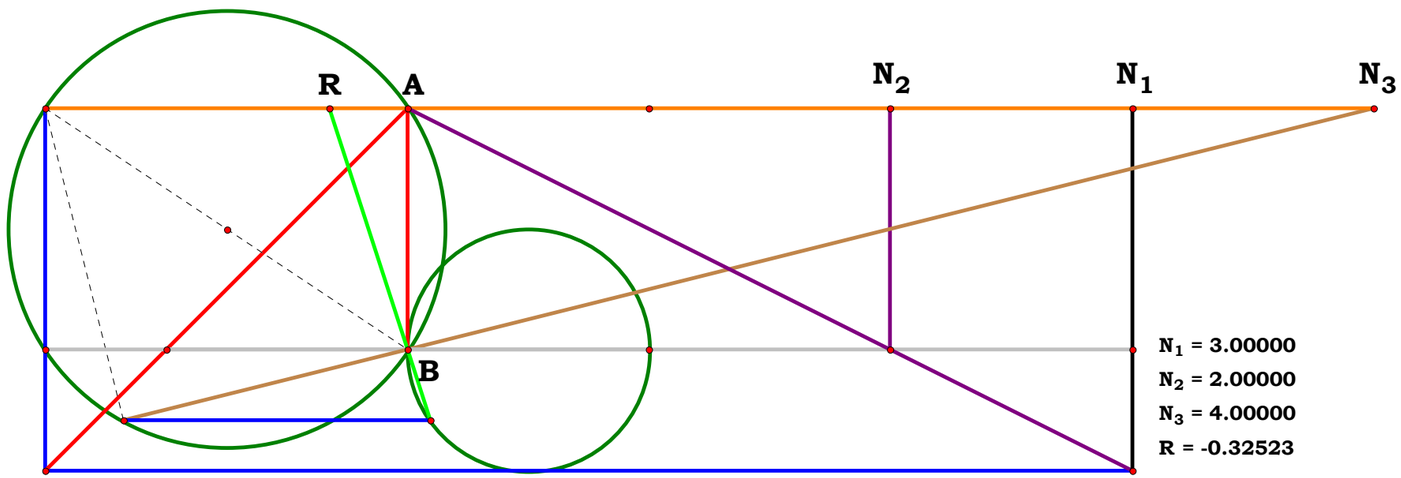
$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$BG := FO - GO$ $R := \frac{BG}{EH}$

$R = 0.457008$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$R = -0.32523$

$$\frac{\sqrt{((N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3) + 3 \cdot N_2) \cdot ((N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) - N_2)} - N_2 \cdot (N_3^2 + 1)}{(2 \cdot (N_1 \cdot N_3 - N_2))} - R = 0.00000$$

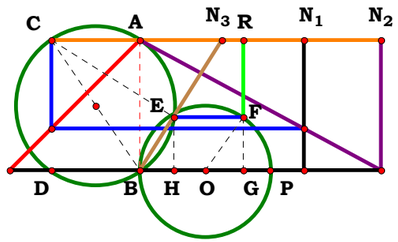
Definitions.

$$R - \frac{\sqrt{\left(N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 3 \cdot N_2\right) \cdot \left(N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3 - N_2\right)} - N_2 \cdot \left(N_3^2 + 1\right)}{2 \cdot \left(N_1 \cdot N_3 - N_2\right)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{A \cdot \left(C^2 + N_u^2\right) - \sqrt{\left(2 \cdot B \cdot C \cdot N_u - 3 \cdot A \cdot C^2 - A \cdot N_u^2\right) \cdot \left(A \cdot C^2 - 2 \cdot B \cdot C \cdot N_u - A \cdot N_u^2\right)}}{2 \cdot C \cdot \left(A \cdot C - B \cdot N_u\right)} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{\left(Y \cdot o \cdot Z^2 + 2 \cdot X \cdot p \cdot Z \cdot q - Y \cdot o \cdot q^2\right) \cdot \left(Y \cdot o \cdot Z^2 - 2 \cdot X \cdot p \cdot Z \cdot q + 3 \cdot Y \cdot o \cdot q^2\right)} - Y \cdot o \cdot \left(Z^2 + q^2\right)}{2 \cdot q \cdot (X \cdot Z \cdot p - Y \cdot o \cdot q)} = 0$$

4RST10BAB5R2



$N_1 = 1.25656$

$N_2 = 1.84739$

$N_3 = 0.63171$

$R = 0.78952$

Unit. $AB := 1$ **Given.** $N_1 := 1.25656$ $N_2 := 1.84739$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

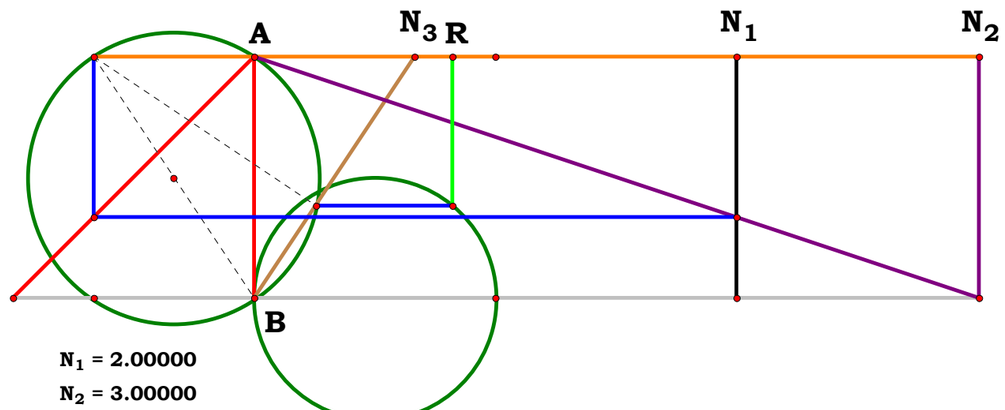
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $EH := \frac{BE}{BN_3}$

$FG := EH$ $BP := AB$

$FO := \frac{BP}{2}$ $GO := \sqrt{FO^2 - FG^2}$

$R := FO + GO$ $R = 0.789522$



$N_1 = 2.00000$

$N_2 = 3.00000$

$N_3 = 0.66667$

$R = 0.81949$

$\frac{N_2 \cdot (N_3^2+1) + \sqrt{((N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) - N_2) \cdot ((N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3) + 3 \cdot N_2)}}{2 \cdot N_2 \cdot (N_3^2+1)} - R = 0.00000$

Definitions.

$$R - \frac{N_2 \cdot \left(N_3^2 + 1\right) + \sqrt{\left(N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3 - N_2\right) \cdot \left(N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3 + 3 \cdot N_2\right)}}{2 \cdot N_2 \cdot \left(N_3^2 + 1\right)} = 0$$

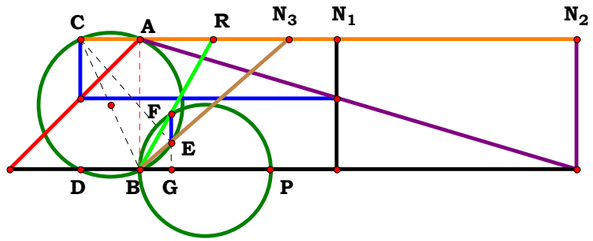
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{\left(2 \cdot B \cdot C \cdot N_u - A \cdot C^2 + A \cdot N_u^2\right) \cdot \left(3 \cdot A \cdot C^2 - 2 \cdot B \cdot C \cdot N_u + A \cdot N_u^2\right)} + A \cdot \left(C^2 + N_u^2\right)}{2 \cdot \left(C^2 + N_u^2\right) \cdot A} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{\left(Y \cdot o \cdot Z^2 + 2 \cdot X \cdot p \cdot Z \cdot q - Y \cdot o \cdot q^2\right) \cdot \left(Y \cdot o \cdot Z^2 - 2 \cdot X \cdot p \cdot Z \cdot q + 3 \cdot Y \cdot o \cdot q^2\right)} + Y \cdot o \cdot \left(Z^2 + q^2\right)}{2 \cdot Y \cdot \left(Z^2 + q^2\right) \cdot o} = 0$$

4RST10BAB5R3



$N_1 = 1.50839$
$N_2 = 3.34869$
$N_3 = 1.14506$
$R = 0.56180$

Unit. $AB := 1$ Given. $N_1 := 1.50839$ $N_2 := 3.34869$ $N_3 := 1.14506$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

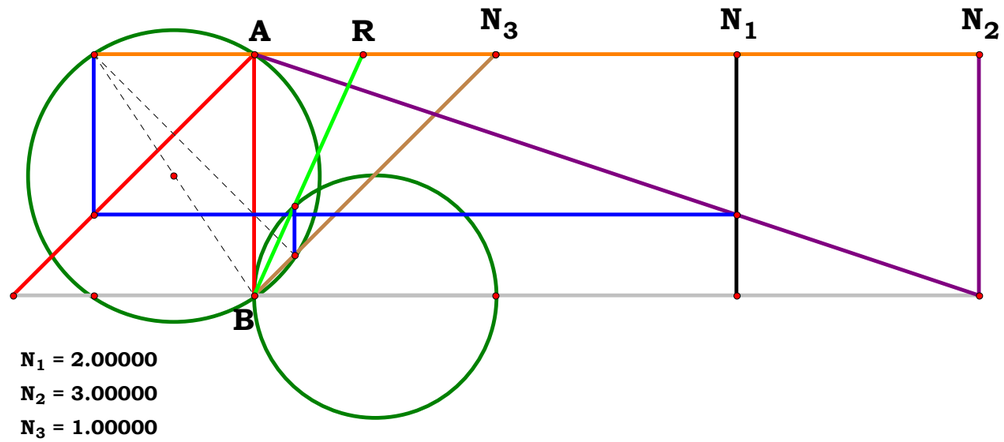
$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + N_3^2}$

$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $BG := \frac{N_3 \cdot BE}{BN_3}$

$BP := AB$ $FG := \sqrt{BG \cdot (BP - BG)}$

$R := \frac{BG}{FG}$ $R = 0.561804$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R = 0.44721$

$\frac{(N_3 \cdot (N_2 - N_1 \cdot N_3))}{\sqrt{(N_3 \cdot (N_2 - N_1 \cdot N_3)) \cdot ((N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2) - N_2 \cdot N_3)}} - R = 0.00000$

Definitions.

$R - \frac{N_3 \cdot (N_2 - N_1 \cdot N_3)}{\sqrt{N_3 \cdot (N_2 - N_1 \cdot N_3) \cdot (N_2 + N_1 \cdot N_3^2 + N_2 \cdot N_3^2 - N_2 \cdot N_3)}} = 0$

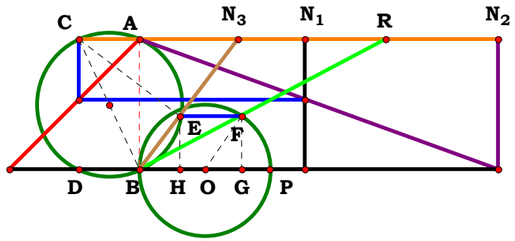
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u)}} = 0$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{Z \cdot (Y \cdot o \cdot q - X \cdot Z \cdot p)}{\sqrt{Z \cdot (Y \cdot o \cdot q - X \cdot Z \cdot p) \cdot (X \cdot Z^2 \cdot p + Y \cdot Z^2 \cdot o + Y \cdot o \cdot q^2 - Y \cdot Z \cdot o \cdot q)}} = 0$

4RST10BAB5R4



$N_1 = 1.26624$
$N_2 = 2.74817$
$N_3 = 0.75763$
$R = 1.88865$

Unit. $AB := 1$ **Given.** $N_1 := 1.26624$ $N_2 := 2.74817$ $N_3 := .75763$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BN_3 := \sqrt{AB^2 + {N_3}^2}$

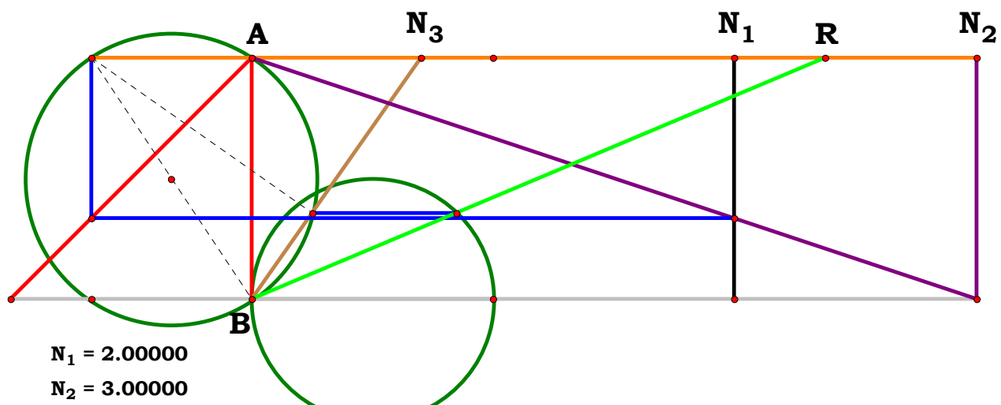
$CN_3 := AC + N_3$ $EN_3 := \frac{N_3 \cdot CN_3}{BN_3}$

$BE := BN_3 - EN_3$ $FG := \frac{BE}{BN_3}$

$BP := AB$ $OF := \frac{BP}{2}$

$GO := \sqrt{OF^2 - FG^2}$ $BG := OF + GO$

$R := \frac{BG}{FG}$ $R = 1.888658$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.70000$
$R = 2.37220$

$\frac{N_2 \cdot (N_3^2+1) + \sqrt{((N_2 \cdot N_3^2 + 2 \cdot N_1 \cdot N_3) - N_2) \cdot ((N_2 \cdot N_3^2 - 2 \cdot N_1 \cdot N_3) + 3 \cdot N_2)}}{(2 \cdot (N_2 - N_1 \cdot N_3))} - R = 0.00000$

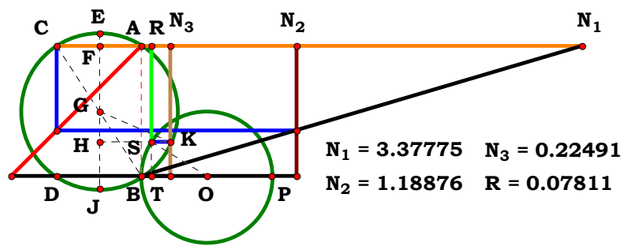
Definitions.

$R - \frac{N_2 \cdot \left({N_3}^2 + 1\right) + \sqrt{\left(N_2 \cdot {N_3}^2 + 2 \cdot N_1 \cdot N_3 - N_2\right) \cdot \left(N_2 \cdot {N_3}^2 - 2 \cdot N_1 \cdot N_3 + 3 \cdot N_2\right)}}{2 \cdot \left(N_2 - N_1 \cdot N_3\right)} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{\left(2 \cdot B \cdot C \cdot N_u - A \cdot C^2 + A \cdot {N_u}^2\right) \cdot \left(3 \cdot A \cdot C^2 - 2 \cdot B \cdot C \cdot N_u + A \cdot {N_u}^2\right)} + A \cdot \left(C^2 + {N_u}^2\right)}{2 \cdot C \cdot \left(A \cdot C - B \cdot N_u\right)} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{\left(Y \cdot o \cdot Z^2 + 2 \cdot X \cdot p \cdot Z \cdot q - Y \cdot o \cdot q^2\right) \cdot \left(Y \cdot o \cdot Z^2 - 2 \cdot X \cdot p \cdot Z \cdot q + 3 \cdot Y \cdot o \cdot q^2\right)} + Y \cdot o \cdot \left(Z^2 + q^2\right)}{2 \cdot q \cdot (Y \cdot o \cdot q - X \cdot Z \cdot p)} = 0$

4RST10CAB1R0



Unit. $AB := 1$ Given. $N_1 := 3.37775$ $N_2 := 1.18876$ $N_3 := .22491$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

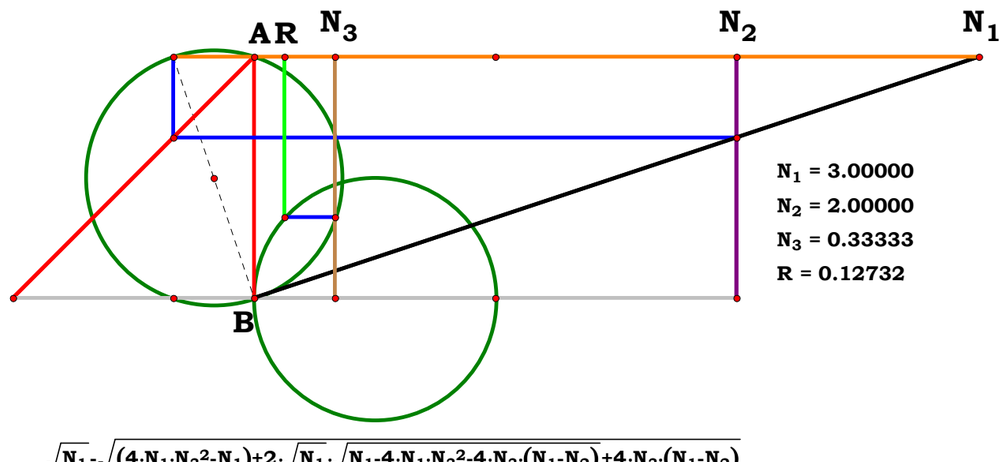
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$

$HK := AF + N_3$ $GH := \sqrt{GK^2 - HK^2}$

$ST := GK - (GH + EF)$ $BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO - OT$

$R = 0.078116$



$$\frac{\sqrt{N_1}\cdot\sqrt{(4\cdot N_1\cdot N_3^2-N_1)}+2\cdot\sqrt{N_1}\cdot\sqrt{N_1-4\cdot N_1\cdot N_3^2-4\cdot N_3\cdot(N_1-N_2)}+4\cdot N_3\cdot(N_1-N_2)}{2\cdot\sqrt{N_1}} - R = 0.00000$$

Definitions.

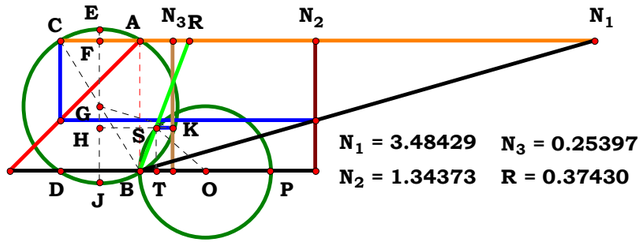
$$R - \frac{1 - \sqrt{4\cdot N_3^2 + 4\cdot AC\cdot N_3 + 2\cdot\sqrt{-4\cdot N_3^2 - 4\cdot AC\cdot N_3 + 1} - 1}}{2} = 0$$

$$R - \frac{\sqrt{N_1} - \sqrt{4\cdot N_1\cdot N_3^2 - N_1 + 2\cdot\sqrt{N_1}\cdot\sqrt{N_1 - 4\cdot N_1\cdot N_3^2 - 4\cdot N_3\cdot(N_1 - N_2)} + 4\cdot N_3\cdot(N_1 - N_2)}}{2\cdot\sqrt{N_1}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}} - \sqrt{A}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left[B\cdot C^2 - 4\cdot B\cdot N_u^2 + 4\cdot C\cdot N_u\cdot(A - B)\right]} - \sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left[B\cdot\left(C^2 - 4\cdot N_u^2\right) + 4\cdot C\cdot N_u\cdot(A - B)\right]\right]}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{X}\cdot q\cdot(o\cdot p)^{\frac{3}{4}} - \sqrt{o}\cdot\sqrt{\sqrt{o\cdot p}\cdot\left(4\cdot X\cdot Z^2\cdot p - X\cdot p\cdot q^2 + 4\cdot X\cdot Z\cdot p\cdot q - 4\cdot Y\cdot Z\cdot o\cdot q\right) + 2\cdot\sqrt{X}\cdot\sqrt{o}\cdot p\cdot q\cdot\sqrt{X\cdot p\cdot q^2 - 4\cdot Z\cdot(X\cdot Z\cdot p + X\cdot p\cdot q - Y\cdot o\cdot q)}}}{2\cdot\sqrt{X}\cdot(o\cdot p)^{\frac{3}{4}}\cdot q} = 0$$

4RST10CAB1R1



Unit. $AB := 1$ Given. $N_1 := 3.48429$ $N_2 := 1.34373$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

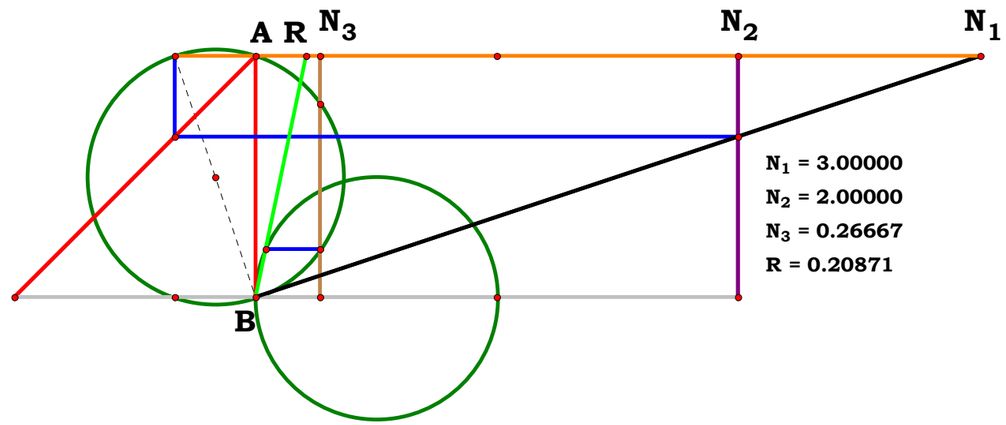
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$BT := BO - OT$ $R := \frac{BT}{ST}$ $R = 0.374325$



Definitions.

$$R - \frac{\sqrt{4 \cdot N_3 \cdot (AC + N_3) + 2 \cdot \sqrt{1 - 4 \cdot N_3 \cdot (AC + N_3)} - 1} - 1}{\sqrt{1 - 4 \cdot N_3 \cdot (AC + N_3)} - 1} = 0$$

$$\frac{\sqrt{N_1} - \sqrt{((4 \cdot N_3 \cdot ((N_1 - N_2) + N_1 \cdot N_3)) - N_1) + 2 \cdot \sqrt{N_1} \cdot \sqrt{N_1 - (4 \cdot N_3 \cdot ((N_1 - N_2) + N_1 \cdot N_3))}}}{\sqrt{N_1} - \sqrt{N_1 - (4 \cdot N_3 \cdot ((N_1 - N_2) + N_1 \cdot N_3))}} - R = 0.00000$$

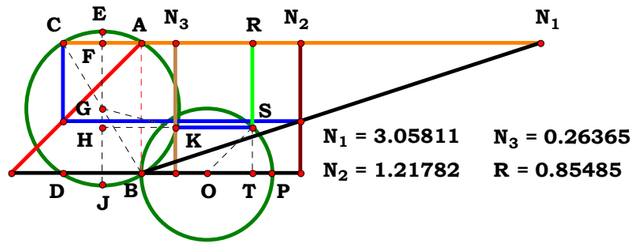
$$R - \frac{\sqrt{N_1} - \sqrt{4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3) - N_1 + 2 \cdot \sqrt{N_1} \cdot \sqrt{N_1 - 4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3)}}}{\sqrt{N_1} - \sqrt{N_1 - 4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{C \cdot \sqrt{N_u} \cdot (A \cdot B)^{\frac{3}{4}} - \sqrt{A} \cdot \sqrt{4 \cdot \sqrt{A \cdot B} \cdot N_u^2 \cdot (B \cdot C - A \cdot C + B \cdot N_u) - \sqrt{N_u} \cdot B \cdot C \cdot \left[C \cdot \sqrt{N_u} \cdot \sqrt{A \cdot B} - 2 \cdot \sqrt{A} \cdot \sqrt{4 \cdot A \cdot C \cdot N_u^2 + B \cdot N_u \cdot (C^2 - 4 \cdot C \cdot N_u - 4 \cdot N_u^2)}\right]}}{\left(C \cdot \sqrt{N_u} \cdot \sqrt{A \cdot B} - \sqrt{A} \cdot \sqrt{4 \cdot A \cdot C \cdot N_u^2 - 4 \cdot B \cdot N_u^3 - 4 \cdot B \cdot C \cdot N_u^2 + B \cdot C^2 \cdot N_u}\right) \cdot (A \cdot B)^{\frac{1}{4}}} = 0$$

$$R - \frac{\sqrt{X} \cdot q \cdot (o \cdot p)^{\frac{3}{4}} - \sqrt{o} \cdot \sqrt{\sqrt{o \cdot p} \cdot (4 \cdot X \cdot Z^2 \cdot p - X \cdot p \cdot q^2 + 4 \cdot X \cdot Z \cdot p \cdot q - 4 \cdot Y \cdot Z \cdot o \cdot q) + 2 \cdot \sqrt{X} \cdot \sqrt{o} \cdot p \cdot q \cdot \sqrt{X \cdot p \cdot q^2 - 4 \cdot X \cdot Z^2 \cdot p - 4 \cdot X \cdot Z \cdot p \cdot q + 4 \cdot Y \cdot Z \cdot o \cdot q}}}{(o \cdot p)^{\frac{1}{4}} \cdot \left(\sqrt{X} \cdot q \cdot \sqrt{o \cdot p} - \sqrt{o} \cdot \sqrt{X \cdot p \cdot q^2 - 4 \cdot X \cdot Z^2 \cdot p - 4 \cdot X \cdot Z \cdot p \cdot q + 4 \cdot Y \cdot Z \cdot o \cdot q}\right)} = 0$$

4RST10CAB1R2



Unit. $AB := 1$ Given. $N_1 := 3.05811$ $N_2 := 1.21782$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

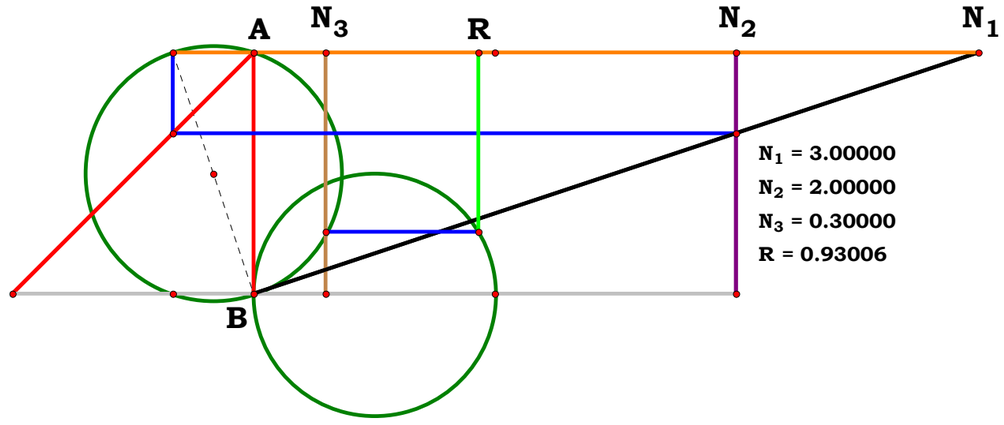
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$R := BO + OT$ $R = 0.854855$



Definitions.

$$\frac{\sqrt{N_1}+\sqrt{((4\cdot N_3\cdot((N_1-N_2)+N_1\cdot N_3))-N_1)+2\cdot\sqrt{N_1}\cdot\sqrt{N_1-(4\cdot N_3\cdot((N_1-N_2)+N_1\cdot N_3))}}}{2\cdot\sqrt{N_1}} - R = 0.00000$$

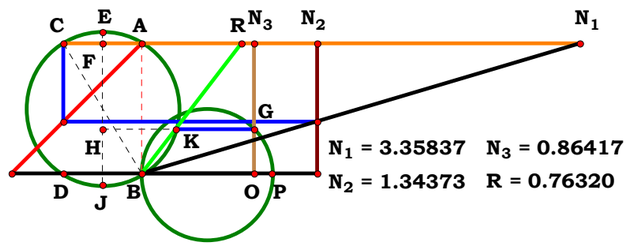
$$R - \frac{\sqrt{4\cdot N_3^2 + 4\cdot AC\cdot N_3 + 2\cdot\sqrt{1 - 4\cdot AC\cdot N_3 - 4\cdot N_3^2} - 1} + 1}{2} = 0$$

$$R - \frac{\sqrt{N_1} + \sqrt{4\cdot N_3\cdot(N_1 - N_2 + N_1\cdot N_3) - N_1 + 2\cdot\sqrt{N_1}\cdot\sqrt{N_1 - 4\cdot N_3\cdot(N_1 - N_2 + N_1\cdot N_3)}}}{2\cdot\sqrt{N_1}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left[B\cdot C^2 + 4\cdot C\cdot N_u\cdot(A - B) - 4\cdot B\cdot N_u^2\right] - 2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left[B\cdot C^2 + 4\cdot C\cdot N_u\cdot(A - B) - 4\cdot B\cdot N_u^2\right]}\right]} + C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C} = 0$$

$$R - \frac{\sqrt{o}\cdot\sqrt{2\cdot\sqrt{X}\cdot\sqrt{o}\cdot p\cdot q\cdot\sqrt{X\cdot p\cdot q^2 - 4\cdot Z\cdot(X\cdot Z\cdot p + X\cdot p\cdot q - Y\cdot o\cdot q)}} - \sqrt{o\cdot p}\cdot\left[X\cdot p\cdot q^2 - 4\cdot Z\cdot(X\cdot Z\cdot p + X\cdot p\cdot q - Y\cdot o\cdot q)\right] + \sqrt{X}\cdot q\cdot(o\cdot p)^{\frac{3}{4}}}{2\cdot\sqrt{X}\cdot(o\cdot p)^{\frac{3}{4}}\cdot q} = 0$$

4RST10CAB1R3



Unit. $AB := 1$ Given. $N_1 := 3.35837$ $N_2 := 1.34373$ $N_3 := .86417$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

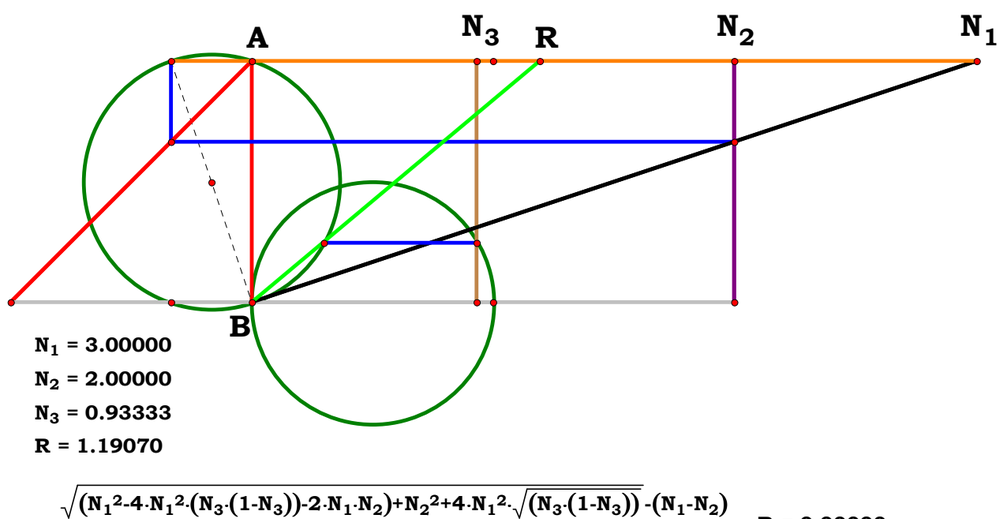
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.763199$



Definitions.

$$\frac{\sqrt{(N_1^2-4\cdot N_1^2\cdot(N_3\cdot(1-N_3))-2\cdot N_1\cdot N_2)+N_2^2+4\cdot N_1^2\cdot\sqrt{(N_3\cdot(1-N_3))}}-(N_1-N_2)}{2\cdot N_1\cdot\sqrt{(N_3\cdot(1-N_3))}}-R = 0.00000$$

$$R - \frac{\sqrt{AC^2 + 4\cdot N_3\cdot(N_3-1) + 4\cdot\sqrt{N_3\cdot(1-N_3)}} - AC}{2\cdot\sqrt{N_3\cdot(1-N_3)}} = 0$$

$$R - \frac{\sqrt{N_1^2 - 4\cdot N_1^2\cdot N_3\cdot(1-N_3) - 2\cdot N_1\cdot N_2 + N_2^2 + 4\cdot N_1^2\cdot\sqrt{N_3\cdot(1-N_3)}} - (N_1 - N_2)}{2\cdot N_1\cdot\sqrt{N_3\cdot(1-N_3)}} = 0$$

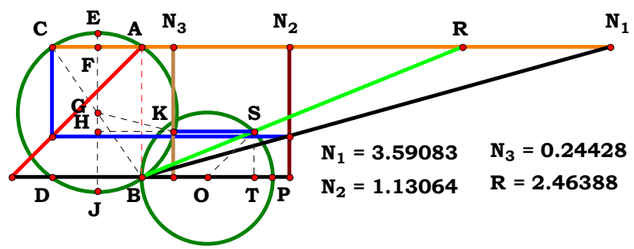
$$N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot(A-B) + \sqrt{A^2\cdot C^2 + B^2\cdot C^2 + 4\cdot B^2\cdot N_u^2 - 2\cdot A\cdot B\cdot C^2 - 4\cdot B^2\cdot C\cdot N_u + 4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}}{2\cdot B\cdot\sqrt{N_u\cdot(C-N_u)}} = 0$$

$$N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4\cdot X^2\cdot Z^2\cdot p^2 - 4\cdot X^2\cdot Z\cdot p^2\cdot q + X^2\cdot p^2\cdot q^2 + Y^2\cdot o^2\cdot q^2 + 4\cdot X^2\cdot p^2\cdot q\cdot\sqrt{Z\cdot q - Z^2} - 2\cdot X\cdot Y\cdot o\cdot p\cdot q^2} - q\cdot(X\cdot p - Y\cdot o)}{2\cdot X\cdot p\cdot\sqrt{Z\cdot q - Z^2}} = 0$$

4RST10CAB1R4



Unit. $AB := 1$ Given. $N_1 := 3.59083$ $N_2 := 1.13064$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

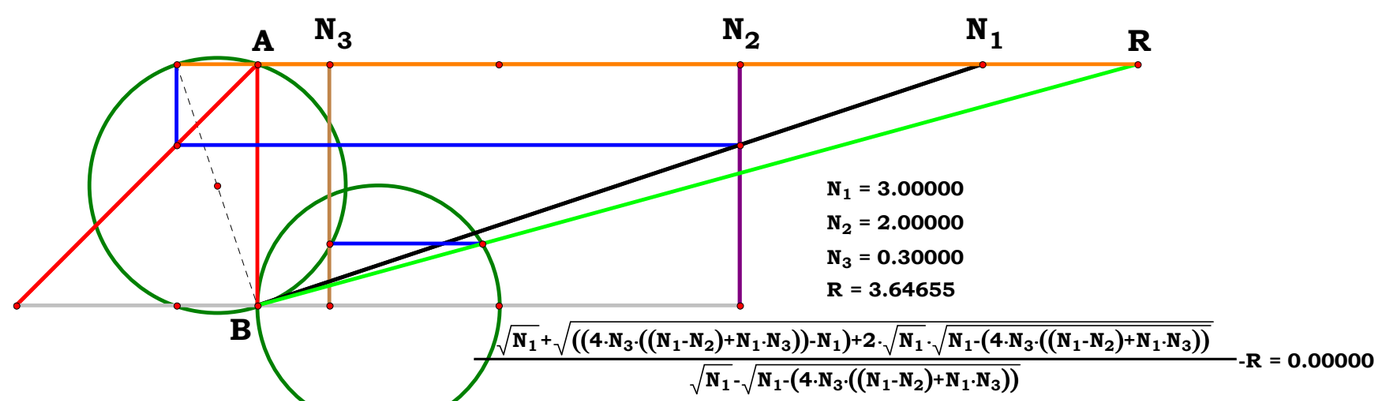
$AC := \frac{N_1 - N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$BT := BO + OT$ $R := \frac{BT}{ST}$ $R = 2.46388$



Definitions.

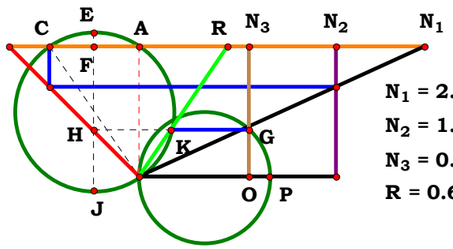
$$R - \frac{\sqrt{4 \cdot N_3 \cdot (AC + N_3) + 2 \cdot \sqrt{1 - 4 \cdot N_3 \cdot (AC + N_3)} - 1} + 1}{1 - \sqrt{1 - 4 \cdot N_3 \cdot (AC + N_3)}} = 0$$

$$R - \frac{\sqrt{N_1} + \sqrt{4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3) - N_1 + 2 \cdot \sqrt{N_1} \cdot \sqrt{N_1 - 4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3)}}}{\sqrt{N_1} - \sqrt{N_1 - 4 \cdot N_3 \cdot (N_1 - N_2 + N_1 \cdot N_3)}} = 0 \quad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0 \quad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{A} \cdot \sqrt{-\sqrt{N_u} \cdot \left[\sqrt{N_u} \cdot \sqrt{A \cdot B} \cdot \left(B \cdot C^2 - 4 \cdot B \cdot {N_u}^2 + 4 \cdot A \cdot C \cdot N_u - 4 \cdot B \cdot C \cdot N_u\right) - 2 \cdot \sqrt{A} \cdot B \cdot C \cdot \sqrt{N_u \cdot \left(B \cdot C^2 - 4 \cdot B \cdot {N_u}^2 + 4 \cdot A \cdot C \cdot N_u - 4 \cdot B \cdot C \cdot N_u\right)}\right]} + C \cdot \sqrt{N_u} \cdot (A \cdot B)^{\frac{3}{4}}}{(A \cdot B)^{\frac{1}{4}} \cdot \left[C \cdot \sqrt{N_u} \cdot \sqrt{A \cdot B} - \sqrt{A} \cdot \sqrt{N_u \cdot \left(B \cdot C^2 - 4 \cdot B \cdot {N_u}^2 + 4 \cdot A \cdot C \cdot N_u - 4 \cdot B \cdot C \cdot N_u\right)}\right]} = 0$$

$$R - \frac{\sqrt{o} \cdot \sqrt{\sqrt{o \cdot p} \cdot \left(4 \cdot X \cdot Z^2 \cdot p - X \cdot p \cdot q^2 + 4 \cdot X \cdot Z \cdot p \cdot q - 4 \cdot Y \cdot Z \cdot o \cdot q\right) + 2 \cdot \sqrt{X} \cdot \sqrt{o} \cdot p \cdot q \cdot \sqrt{X \cdot p \cdot q^2 - 4 \cdot X \cdot Z^2 \cdot p - 4 \cdot X \cdot Z \cdot p \cdot q + 4 \cdot Y \cdot Z \cdot o \cdot q}} + \sqrt{X} \cdot q \cdot (o \cdot p)^{\frac{3}{4}}}{\left(\sqrt{X} \cdot q \cdot \sqrt{o \cdot p} - \sqrt{o} \cdot \sqrt{X \cdot p \cdot q^2 - 4 \cdot X \cdot Z^2 \cdot p - 4 \cdot X \cdot Z \cdot p \cdot q + 4 \cdot Y \cdot Z \cdot o \cdot q}\right) \cdot (o \cdot p)^{\frac{1}{4}}} = 0$$

4RST10CAB2R3



$N_1 = 2.18639$
$N_2 = 1.50839$
$N_3 = 0.84480$
$R = 0.68113$

Unit. $AB := 1$ **Given.** $N_1 := 2.18639$ $N_2 := 1.50839$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

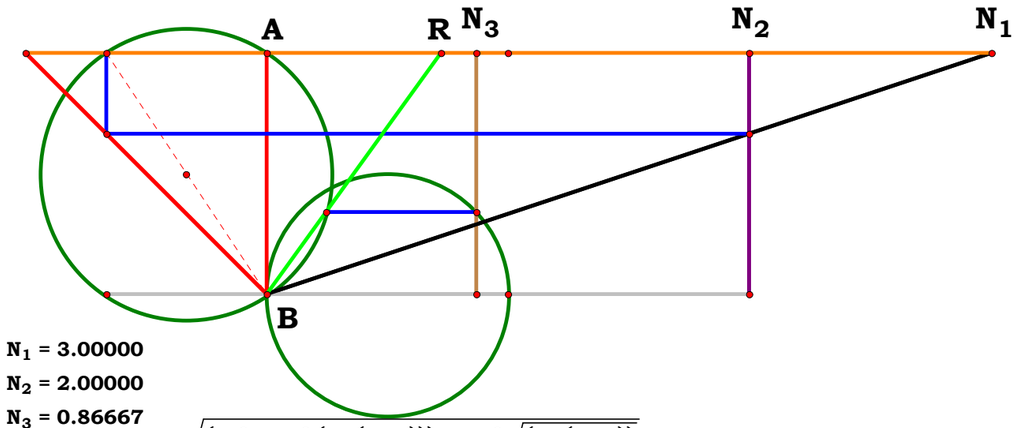
$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.681133$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 0.86667$
$R = 0.72332$

$\frac{\sqrt{(N_2^2 - 4 \cdot N_1^2 \cdot (N_3 \cdot (1 - N_3))) + 4 \cdot N_1^2 \cdot \sqrt{(N_3 \cdot (1 - N_3))}} - N_2}{2 \cdot N_1 \cdot \sqrt{(N_3 \cdot (1 - N_3))}} - R = 0.00000$

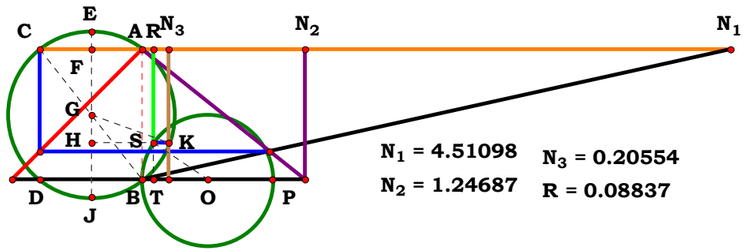
Definitions.

$R - \frac{\sqrt{N_2^2 - 4 \cdot N_1^2 \cdot N_3 \cdot (1 - N_3) + 4 \cdot N_1^2 \cdot \sqrt{N_3 \cdot (1 - N_3)}} - N_2}{2 \cdot N_1 \cdot \sqrt{N_3 \cdot (1 - N_3)}} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot N_u^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C}{2 \cdot B \cdot \sqrt{N_u \cdot (C - N_u)}} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{4 \cdot X^2 \cdot Z^2 \cdot p^2 + Y^2 \cdot o^2 \cdot q^2 - 4 \cdot X^2 \cdot Z \cdot p^2 \cdot q + 4 \cdot X^2 \cdot p^2 \cdot q \cdot \sqrt{Z \cdot q - Z^2}} - Y \cdot o \cdot q}{2 \cdot X \cdot p \cdot \sqrt{Z \cdot q - Z^2}} = 0$

4RST10CAB3R0



Unit. $AB := 1$ Given. $N_1 := 4.51098$ $N_2 := 1.24687$ $N_3 := .20554$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

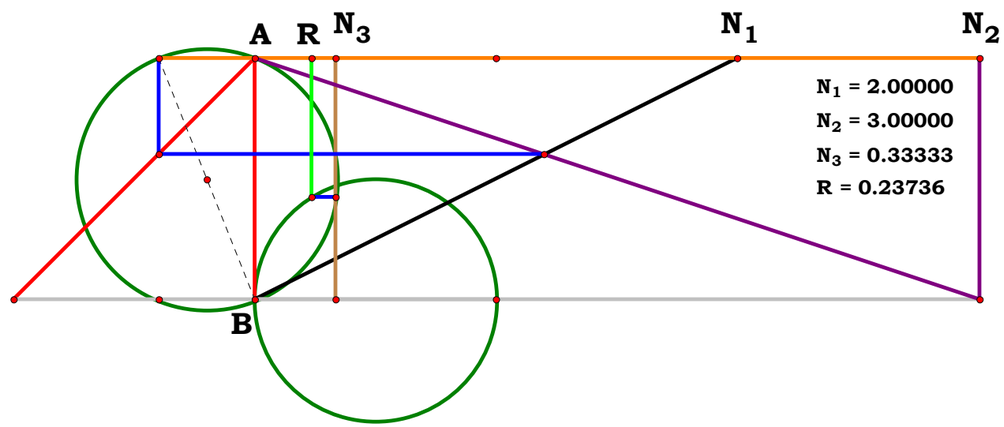
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$R := BO - OT$ $R = 0.088378$



$$\frac{\sqrt{(N_1+N_2)}\cdot\sqrt{4\cdot N_1\cdot N_3+(N_1+N_2)\cdot(4\cdot N_3{}^2-1)+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-4\cdot N_3{}^2\cdot(N_1+N_2)-4\cdot N_1\cdot N_3}}}{2\cdot\sqrt{(N_1+N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1 + N_2} - \sqrt{4\cdot N_1\cdot N_3 + \left(4\cdot N_3{}^2 - 1\right)\cdot\left(N_1 + N_2\right) + 2\cdot\sqrt{N_1 + N_2}\cdot\sqrt{N_1 + N_2 - 4\cdot N_3{}^2\cdot\left(N_1 + N_2\right) - 4\cdot N_1\cdot N_3}}}{2\cdot\sqrt{N_1 + N_2}} = 0$$

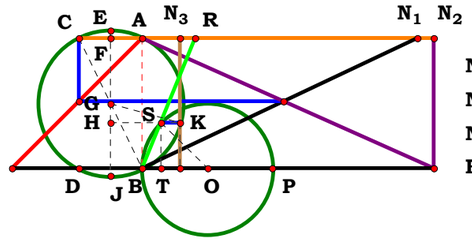
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{C\cdot\sqrt{N_u\cdot(A+B)} - \sqrt{N_u\cdot\left(4\cdot A\cdot N_u{}^2 - B\cdot C^2 - A\cdot C^2 + 4\cdot B\cdot N_u{}^2 + 4\cdot B\cdot C\cdot N_u\right) + 2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2 + B\cdot C^2 - 4\cdot A\cdot N_u{}^2 - 4\cdot B\cdot N_u{}^2 - 4\cdot B\cdot C\cdot N_u\right)}}}{2\cdot C\cdot\sqrt{N_u\cdot(A+B)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{q\cdot\sqrt{X\cdot p + Y\cdot o} - \sqrt{4\cdot X\cdot Z^2\cdot p + 4\cdot Y\cdot Z^2\cdot o - X\cdot p\cdot q^2 - Y\cdot o\cdot q^2 + 2\cdot q\cdot\sqrt{X\cdot p + Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o - 4\cdot X\cdot Z^2\cdot p + Y\cdot o\cdot q^2 - 4\cdot X\cdot Z\cdot p\cdot q} + 4\cdot X\cdot Z\cdot p\cdot q}}{2\cdot\sqrt{X\cdot p + Y\cdot o}\cdot q} = 0$$

4RST10CAB3R1



$N_1 = 2.10891$
$N_2 = 2.23482$
$N_3 = 0.29271$
$R = 0.40996$

Unit. $AB := 1$ Given. $N_1 := 2.10891$ $N_2 := 2.23482$ $N_3 := .29271$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

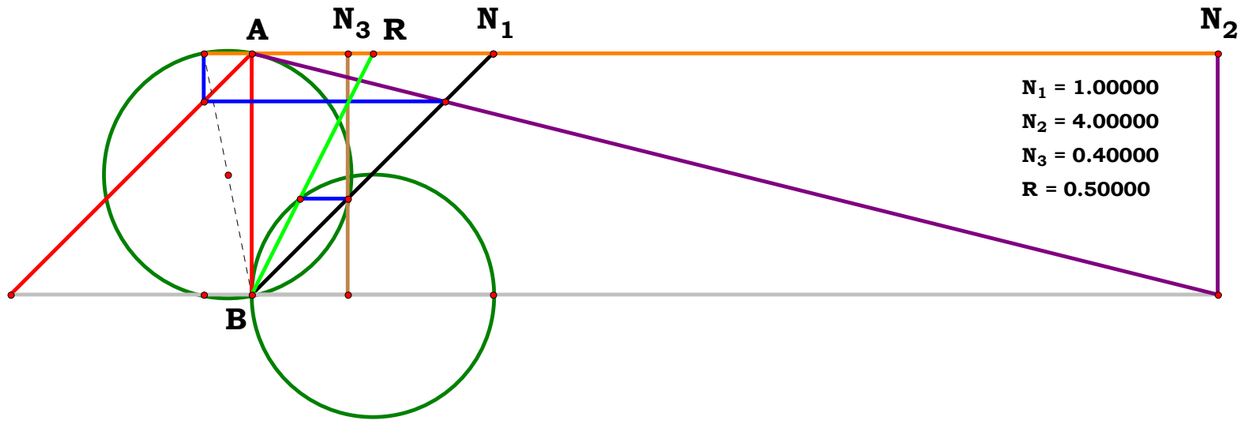
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$BT := BO - OT$ $R := \frac{BT}{ST}$ $R = 0.409965$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 0.40000$
$R = 0.50000$

$$\frac{\sqrt{(N_1+N_2)}-\sqrt{((4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))}+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))}}{\sqrt{(N_1+N_2)}-\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))}}-R = 0.00000$$

Definitions.

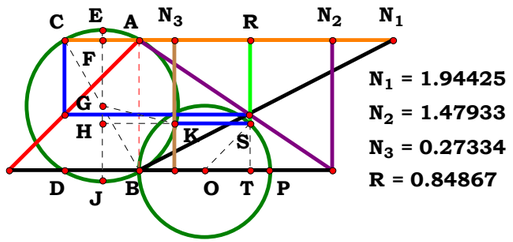
$$R - \frac{\sqrt{N_1 + N_2} - \sqrt{4\cdot N_3\cdot\left(N_1 + N_1\cdot N_3 + N_2\cdot N_3\right) - \left(N_1 + N_2\right) + 2\cdot\sqrt{N_1 + N_2}\cdot\sqrt{N_1 + N_2 - 4\cdot N_3\cdot\left(N_1 + N_1\cdot N_3 + N_2\cdot N_3\right)}}}{\sqrt{N_1 + N_2} - \sqrt{N_1 + N_2 - 4\cdot N_3\cdot\left(N_1 + N_1\cdot N_3 + N_2\cdot N_3\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot\sqrt{N_u\cdot(A+B)} - \sqrt{4\cdot A\cdot {N_u}^3 + 4\cdot B\cdot {N_u}^3 + 2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2 + B\cdot C^2 - 4\cdot A\cdot {N_u}^2 - 4\cdot B\cdot {N_u}^2 - 4\cdot B\cdot C\cdot N_u\right)} - A\cdot C^2\cdot N_u - B\cdot C\cdot N_u\cdot\left(C - 4\cdot N_u\right)}}{C\cdot\sqrt{N_u\cdot(A+B)} - \sqrt{N_u\cdot\left(A\cdot C^2 + B\cdot C^2 - 4\cdot A\cdot {N_u}^2 - 4\cdot B\cdot {N_u}^2 - 4\cdot B\cdot C\cdot N_u\right)}} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{q\cdot\sqrt{X\cdot p + Y\cdot o} - \sqrt{(2\cdot Z - q)\cdot(2\cdot Z + q)\cdot(X\cdot p + Y\cdot o) + 2\cdot q\cdot\sqrt{X\cdot p + Y\cdot o}\cdot\sqrt{\left(q^2 - 4\cdot Z^2\right)\cdot(X\cdot p + Y\cdot o) - 4\cdot X\cdot Z\cdot p\cdot q} + 4\cdot X\cdot Z\cdot p\cdot q}}{q\cdot\sqrt{X\cdot p + Y\cdot o} - \sqrt{\left(q^2 - 4\cdot Z^2\right)\cdot(X\cdot p + Y\cdot o) - 4\cdot X\cdot Z\cdot p\cdot q}} = 0$$

4RST10CAB3R2



Unit. $AB := 1$ Given. $N_1 := 1.94425$ $N_2 := 1.47933$ $N_3 := .27334$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

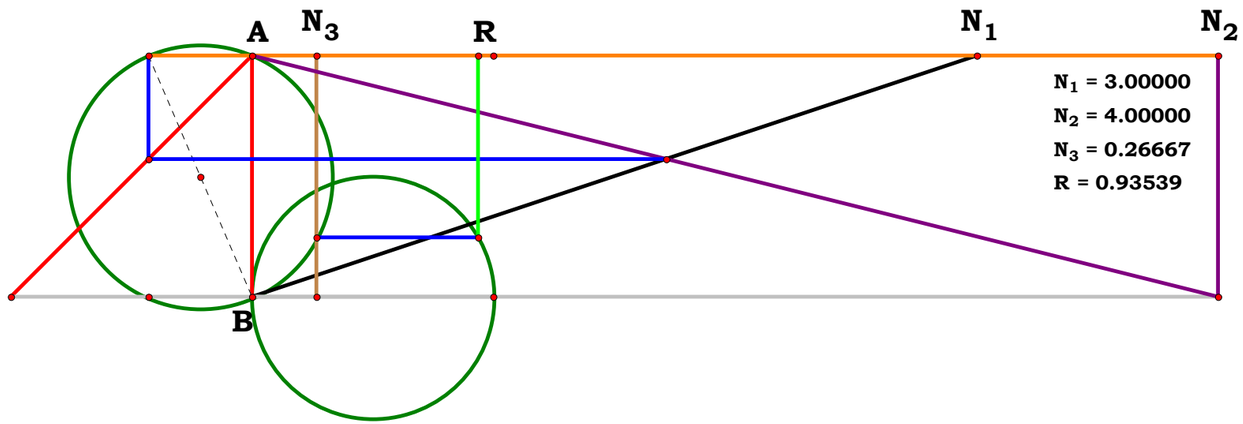
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO + OT$

$R = 0.848658$



$$\frac{\sqrt{(N_1+N_2)}+\sqrt{((4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))}}}{2\cdot\sqrt{(N_1+N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1 + N_2} + \sqrt{4\cdot N_3\cdot\left(N_1 + N_1\cdot N_3 + N_2\cdot N_3\right) - \left(N_1 + N_2\right) + 2\cdot\sqrt{N_1 + N_2}\cdot\sqrt{N_1 + N_2 - 4\cdot N_3\cdot\left(N_1 + N_1\cdot N_3 + N_2\cdot N_3\right)}}}{2\cdot\sqrt{N_1 + N_2}} = 0$$

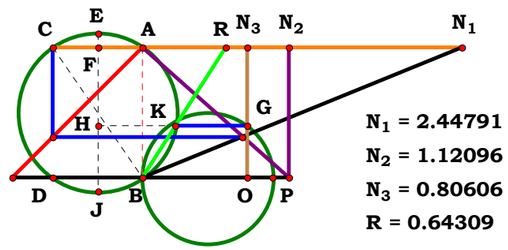
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + 4\cdot B\cdot N_u^2 + 4\cdot B\cdot C\cdot N_u\right)} + 2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2 + B\cdot C^2 - 4\cdot A\cdot N_u^2 - 4\cdot B\cdot N_u^2 - 4\cdot B\cdot C\cdot N_u\right)} + C\cdot\sqrt{N_u\cdot(A+B)}}{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{4\cdot Z^2\cdot(X\cdot p + Y\cdot o) - X\cdot p\cdot q^2 - Y\cdot o\cdot q^2 + 4\cdot X\cdot Z\cdot p\cdot q + 2\cdot q\cdot\sqrt{X\cdot p + Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o - 4\cdot X\cdot Z^2\cdot p + Y\cdot o\cdot q^2 - 4\cdot X\cdot Z\cdot p\cdot q}} + q\cdot\sqrt{X\cdot p + Y\cdot o}}{2\cdot q\cdot\sqrt{X\cdot p + Y\cdot o}} = 0$$

4RST10CAB3R3



$N_1 = 2.44791$
$N_2 = 1.12096$
$N_3 = 0.80606$
$R = 0.64309$

Unit. $AB := 1$ **Given.** $N_1 := 2.44791$ $N_2 := 1.12096$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

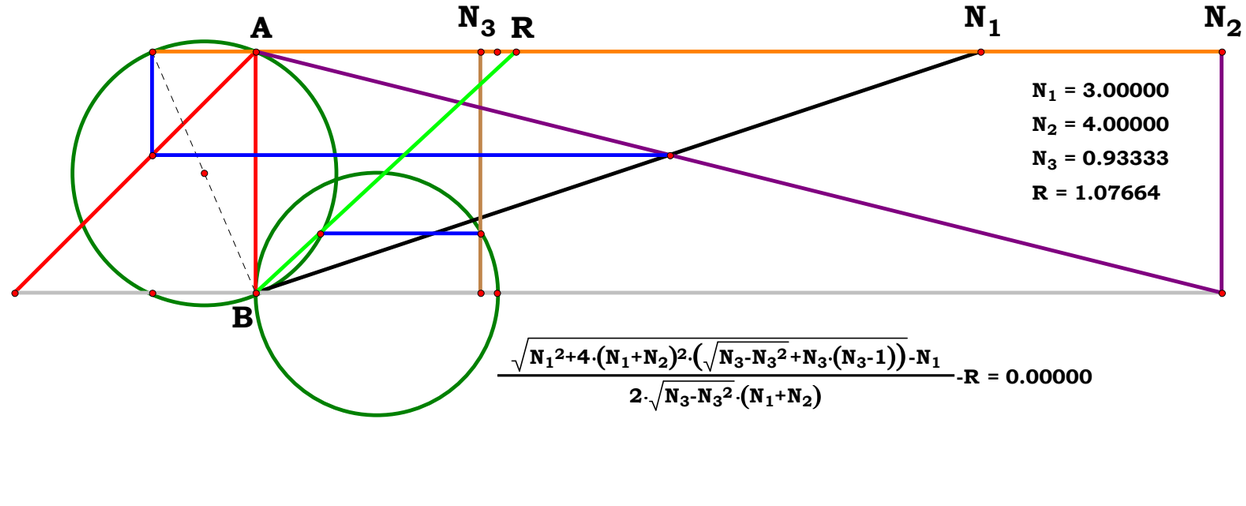
$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.643092$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.93333$
$R = 1.07664$

$$\frac{\sqrt{N_1{}^2+4\cdot(N_1+N_2)^2\cdot\left(\sqrt{N_3-N_3{}^2}+N_3\cdot(N_3-1)\right)}-N_1}{2\cdot\sqrt{N_3-N_3{}^2}\cdot(N_1+N_2)}-R = 0.00000$$

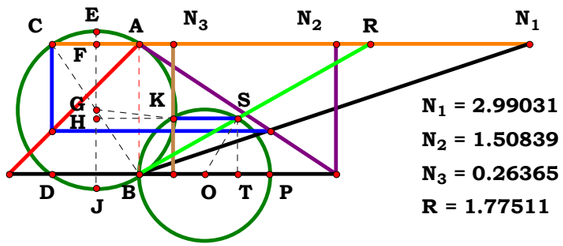
Definitions.

$$R - \frac{\sqrt{N_1{}^2 + 4\cdot(N_1+N_2)^2\cdot\left[\sqrt{N_3 - N_3{}^2} + N_3\cdot(N_3-1)\right]} - N_1}{2\cdot\sqrt{N_3 - N_3{}^2}\cdot(N_1+N_2)} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2\cdot C^2 - 4\cdot N_u\cdot(A+B)^2\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - N_u{}^2}} - B\cdot C}{2\cdot(A+B)\cdot\sqrt{N_u\cdot(C-N_u)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4\cdot q\cdot(X\cdot p + Y\cdot o)^2\cdot\sqrt{Z\cdot q - Z^2} + X^2\cdot p^2\cdot(2\cdot Z - q)^2 + 4\cdot Y\cdot Z\cdot o\cdot(Z-q)\cdot(2\cdot X\cdot p + Y\cdot o)} - X\cdot p\cdot q}{2\cdot(X\cdot p + Y\cdot o)\cdot\sqrt{Z\cdot q - Z^2}} = 0$$

4RST10CAB3R4



$N_1 = 2.99031$
$N_2 = 1.50839$
$N_3 = 0.26365$
$R = 1.77511$

Unit. $AB := 1$ Given. $N_1 := 2.99031$ $N_2 := 1.50829$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

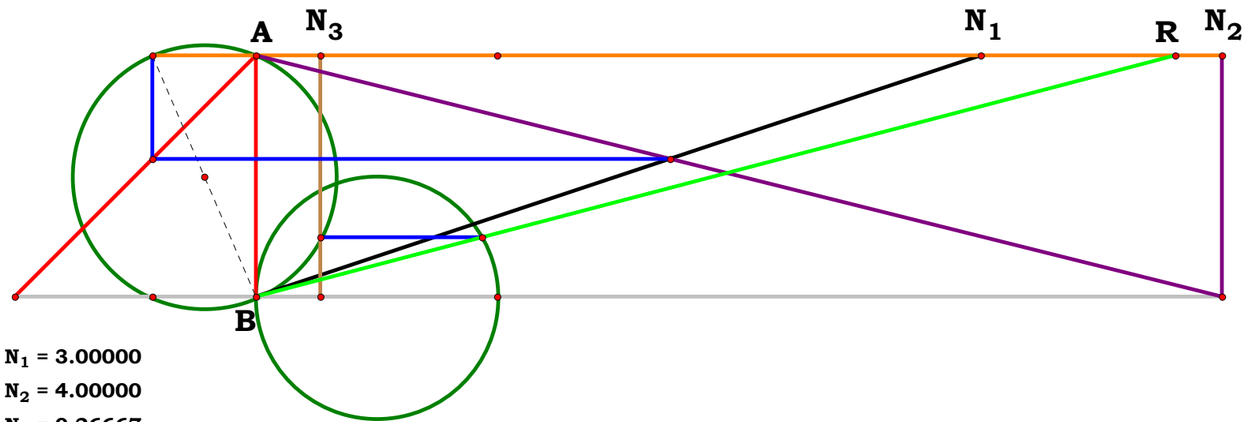
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $BT := BO + OT$

$R := \frac{BT}{ST}$ $R = 1.77501$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.26667$
$R = 3.80507$

$$\frac{\sqrt{(N_1+N_2)}+\sqrt{((4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))}}}{\sqrt{(N_1+N_2)}-\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_1+N_1\cdot N_3+N_2\cdot N_3))}} - R = 0.00000$$

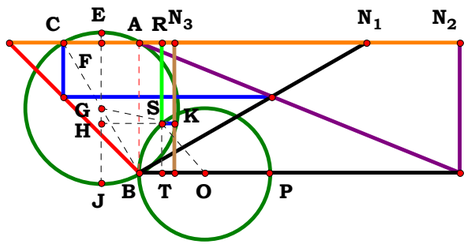
Definitions.

$$R - \frac{\sqrt{N_1+N_2}+\sqrt{4\cdot N_3\cdot\left(N_1+N_1\cdot N_3+N_2\cdot N_3\right)-\left(N_1+N_2\right)+2\cdot\sqrt{N_1+N_2}\cdot\sqrt{N_1+N_2-4\cdot N_3\cdot\left(N_1+N_1\cdot N_3+N_2\cdot N_3\right)}}}{\sqrt{N_1+N_2}-\sqrt{N_1+N_2-4\cdot N_3\cdot\left(N_1+N_1\cdot N_3+N_2\cdot N_3\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{2\cdot C\cdot\sqrt{A+B}\cdot\sqrt{\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot B\cdot C\cdot N_u}-\left[\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot B\cdot C\cdot N_u\right]}+C\cdot\sqrt{(A+B)}}{C\cdot\sqrt{A+B}-\sqrt{\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot B\cdot C\cdot N_u}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{(2\cdot Z-q)\cdot(2\cdot Z+q)\cdot(X\cdot p+Y\cdot o)+4\cdot X\cdot Z\cdot p\cdot q+2\cdot q\cdot\sqrt{X\cdot p+Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2-4\cdot Y\cdot Z^2\cdot o-4\cdot X\cdot Z^2\cdot p+Y\cdot o\cdot q^2-4\cdot X\cdot Z\cdot p\cdot q}}+q\cdot\sqrt{X\cdot p+Y\cdot o}}{q\cdot\sqrt{X\cdot p+Y\cdot o}-\sqrt{X\cdot p\cdot q^2-4\cdot Y\cdot Z^2\cdot o-4\cdot X\cdot Z^2\cdot p+Y\cdot o\cdot q^2-4\cdot X\cdot Z\cdot p\cdot q}} = 0$$

4RST10CAB4R0



$N_1 = 1.74085$
$N_2 = 2.45760$
$N_3 = 0.27334$
$x_R = 0.17083$

Unit. $AB := 1$ Given. $N_1 := 1.74085$ $N_2 := 2.45760$ $N_3 := .27334$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

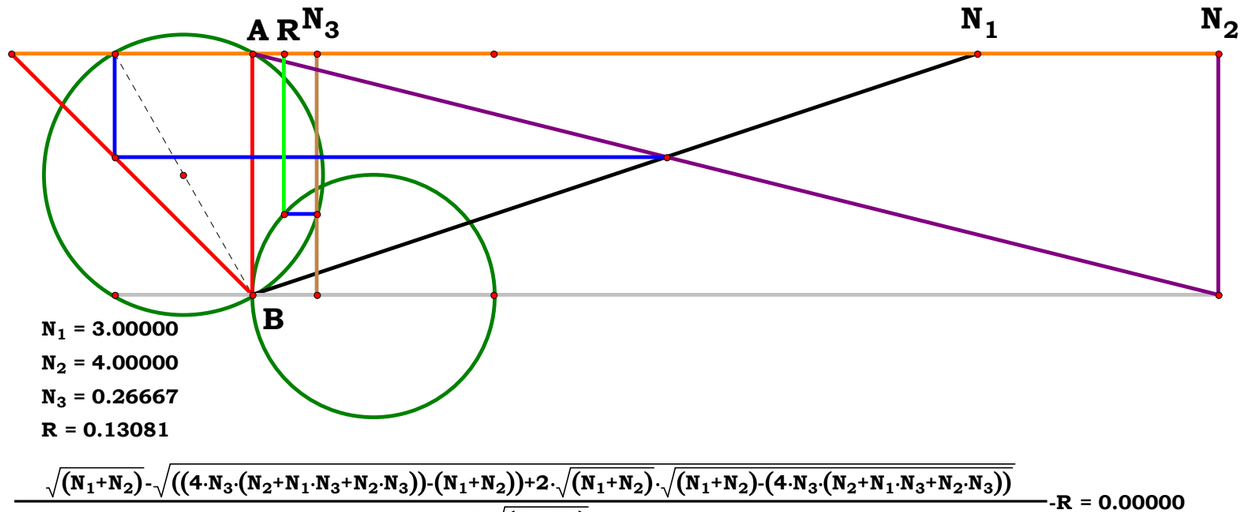
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO - OT$

$R = 0.170846$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.26667$
$R = 0.13081$

$\frac{\sqrt{(N_1+N_2)}-\sqrt{((4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}}}{2\cdot\sqrt{(N_1+N_2)}} - R = 0.00000$

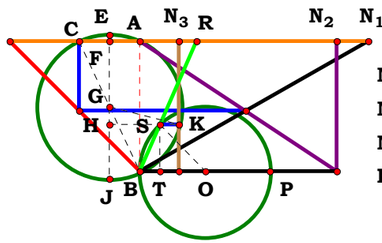
Definitions.

$R - \frac{\sqrt{N_1 + N_2} - \sqrt{4 \cdot N_3 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3) - (N_1 + N_2) + 2 \cdot \sqrt{N_1 + N_2} \cdot \sqrt{N_1 + N_2 - 4 \cdot N_3 \cdot (N_2 + N_1 \cdot N_3 + N_2 \cdot N_3)}}}{2 \cdot \sqrt{N_1 + N_2}} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{C \cdot \sqrt{(A+B)} - \sqrt{2 \cdot C \cdot \sqrt{(A+B)} \cdot \sqrt{\left(C^2 - 4 \cdot N_u^2\right) \cdot (A+B) - 4 \cdot A \cdot C \cdot N_u} - \left[\left(C^2 - 4 \cdot N_u^2\right) \cdot (A+B) - 4 \cdot A \cdot C \cdot N_u\right]}}{2 \cdot \sqrt{(A+B)} \cdot C} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{q \cdot \sqrt{X \cdot p + Y \cdot o} - \sqrt{(2 \cdot Z - q) \cdot (2 \cdot Z + q) \cdot (X \cdot p + Y \cdot o) + 4 \cdot Y \cdot Z \cdot o \cdot q + 2 \cdot q \cdot \sqrt{X \cdot p + Y \cdot o} \cdot \sqrt{X \cdot p \cdot q^2 - 4 \cdot Y \cdot Z^2 \cdot o - 4 \cdot X \cdot Z^2 \cdot p + Y \cdot o \cdot q^2 - 4 \cdot Y \cdot Z \cdot o \cdot q}}}{2 \cdot q \cdot \sqrt{X \cdot p + Y \cdot o}} = 0$

4RST10CAB4R1



$N_1 = 1.75053$
$N_2 = 1.50839$
$N_3 = 0.30239$
$R = 0.43128$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 1.50839$ $N_3 := .30239$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

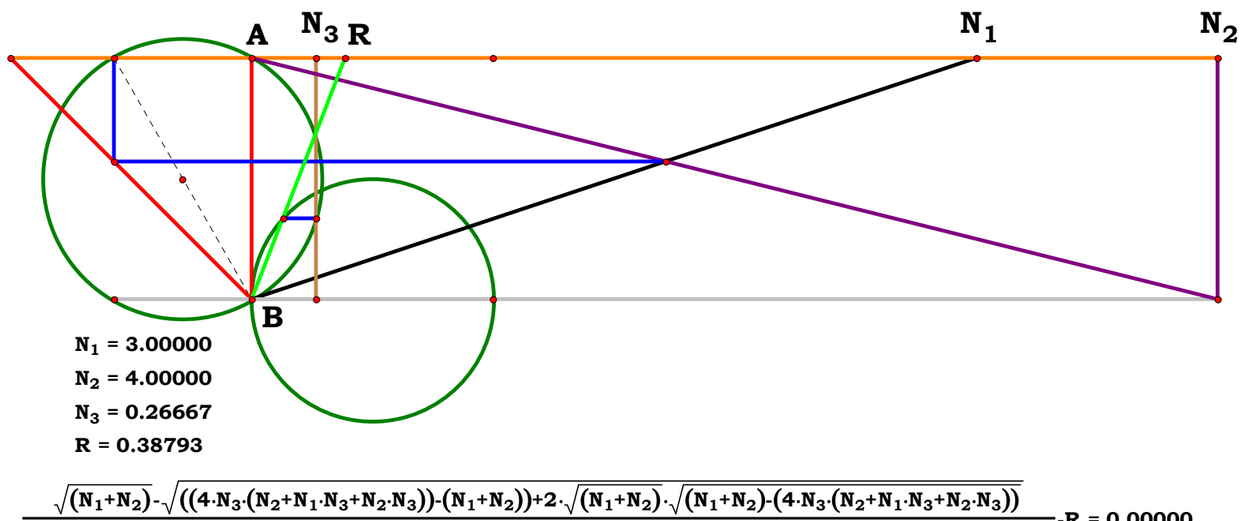
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $BT := BO - OT$

$R := \frac{BT}{ST}$ $R = 0.431244$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.26667$
$R = 0.38793$

$$\frac{\sqrt{(N_1+N_2)}-\sqrt{((4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))}+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}}{\sqrt{(N_1+N_2)}-\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}} - R = 0.00000$$

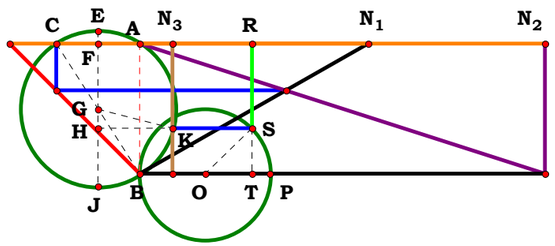
Definitions.

$$R - \frac{\sqrt{N_1+N_2}-\sqrt{4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3)-(N_1+N_2)+2\cdot\sqrt{N_1+N_2}\cdot\sqrt{N_1+N_2-4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3)}}}{\sqrt{N_1+N_2}-\sqrt{N_1+N_2-4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot\sqrt{(A+B)}-\sqrt{2\cdot C\cdot\sqrt{(A+B)}\cdot\sqrt{\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot A\cdot C\cdot N_u}-\left[\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot A\cdot C\cdot N_u\right]}}{C\cdot\sqrt{(A+B)}-\sqrt{\left(C^2-4\cdot N_u^2\right)\cdot(A+B)-4\cdot A\cdot C\cdot N_u}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{q\cdot\sqrt{X\cdot p+Y\cdot o}-\sqrt{4\cdot X\cdot Z^2\cdot p+4\cdot Y\cdot Z^2\cdot o-X\cdot p\cdot q^2-Y\cdot o\cdot q^2+2\cdot q\cdot\sqrt{X\cdot p+Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2-4\cdot Y\cdot Z^2\cdot o-4\cdot X\cdot Z^2\cdot p+Y\cdot o\cdot q^2-4\cdot Y\cdot Z\cdot o\cdot q}+4\cdot Y\cdot Z\cdot o\cdot q}}{q\cdot\sqrt{X\cdot p+Y\cdot o}-\sqrt{X\cdot p\cdot q^2-4\cdot Y\cdot Z^2\cdot o-4\cdot X\cdot Z^2\cdot p+Y\cdot o\cdot q^2-4\cdot Y\cdot Z\cdot o\cdot q}} = 0$$

4RST10CAB4R2



$N_1 = 1.75053$
$N_2 = 3.10654$
$N_3 = 0.25397$
$R = 0.85890$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 3.10654$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

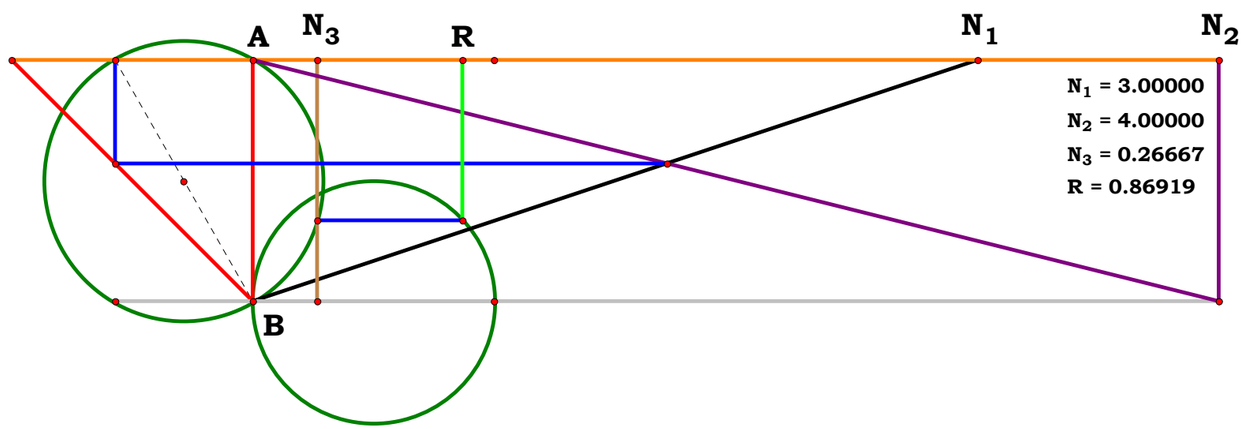
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO + OT$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.26667$
$R = 0.86919$

$R = 0.858888$

$$\frac{\sqrt{(N_1+N_2)}+\sqrt{((4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))}+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}}{2\cdot\sqrt{(N_1+N_2)}} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_1+N_2}+\sqrt{4\cdot N_3\cdot\left(N_2+N_1\cdot N_3+N_2\cdot N_3\right)-\left(N_1+N_2\right)+2\cdot\sqrt{N_1+N_2}\cdot\sqrt{N_1+N_2-4\cdot N_3\cdot\left(N_2+N_1\cdot N_3+N_2\cdot N_3\right)}}}{2\cdot\sqrt{N_1+N_2}} = 0$$

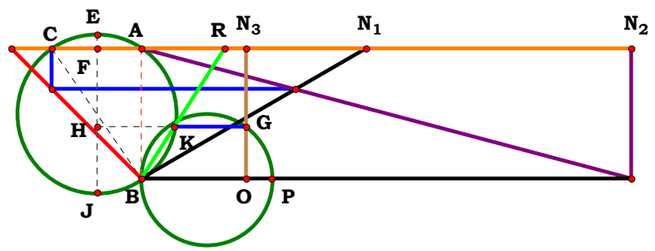
$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot A\cdot C\cdot N_u\right)}-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)-B\cdot C^2\cdot N_u}+C\cdot\sqrt{N_u\cdot(A+B)}}{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{4\cdot X\cdot Z^2\cdot p+4\cdot Y\cdot Z^2\cdot o-X\cdot p\cdot q^2-Y\cdot o\cdot q^2+2\cdot q\cdot\sqrt{X\cdot p+Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2-4\cdot Y\cdot Z^2\cdot o-4\cdot X\cdot Z^2\cdot p+Y\cdot o\cdot q^2-4\cdot Y\cdot Z\cdot o\cdot q}+4\cdot Y\cdot Z\cdot o\cdot q}+q\cdot\sqrt{X\cdot p+Y\cdot o}}{2\cdot q\cdot\sqrt{X\cdot p+Y\cdot o}} = 0$$

4RST10CAB4R3



$N_1 = 1.72148$
$N_2 = 3.75549$
$N_3 = 0.80606$
$R = 0.64320$

Unit. $AB := 1$ **Given.** $N_1 := 1.72148$ $N_2 := 3.75549$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

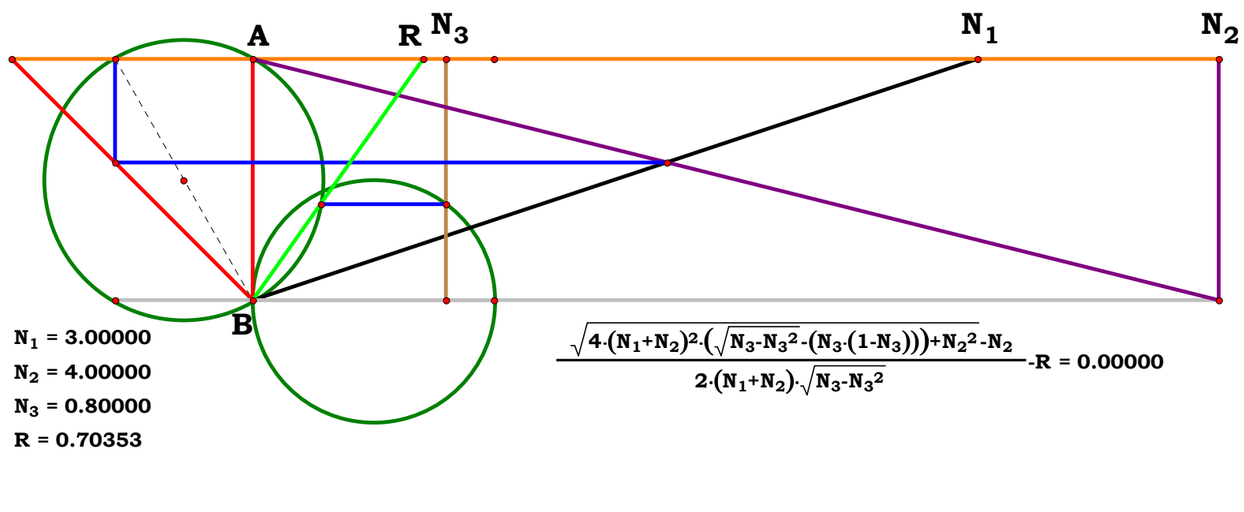
$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.643209$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.80000$
$R = 0.70353$

$\frac{\sqrt{4 \cdot (N_1+N_2)^2 \cdot \left(\sqrt{N_3-N_3^2} - (N_3 \cdot (1-N_3))\right) + N_2^2} - N_2}{2 \cdot (N_1+N_2) \cdot \sqrt{N_3-N_3^2}} - R = 0.00000$

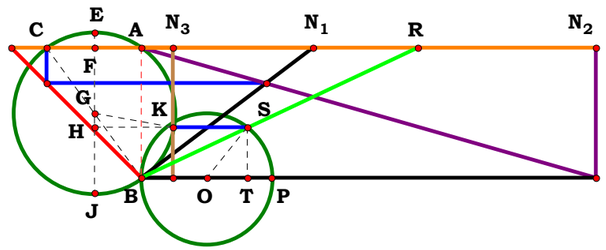
Definitions.

$R - \frac{\sqrt{4 \cdot (N_1 + N_2)^2 \cdot \left[\sqrt{N_3 - N_3^2} - N_3 \cdot (1 - N_3)\right] + N_2^2} - N_2}{2 \cdot (N_1 + N_2) \cdot \sqrt{N_3 - N_3^2}} = 0$ $N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$R - \frac{\sqrt{4 \cdot (A + B)^2 \cdot \left[N_u^2 - C \cdot N_u + C \cdot \sqrt{N_u \cdot (C - N_u)}\right] + A^2 \cdot C^2} - A \cdot C}{2 \cdot (A + B) \cdot \sqrt{N_u \cdot (C - N_u)}} = 0$ $N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$R - \frac{\sqrt{4 \cdot q \cdot (X \cdot p + Y \cdot o)^2 \cdot \sqrt{Z \cdot q - Z^2} + 4 \cdot X \cdot Z \cdot p \cdot (Z - q) \cdot (X \cdot p + 2 \cdot Y \cdot o) + Y^2 \cdot o^2 \cdot (2 \cdot Z - q)^2} - Y \cdot o \cdot q}{2 \cdot (X \cdot p + Y \cdot o) \cdot \sqrt{Z \cdot q - Z^2}} = 0$

4RST10CAB4R4



$N_1 = 1.31467$
$N_2 = 3.48429$
$N_3 = 0.24428$
$R = 2.11761$

Unit. $AB := 1$ **Given.** $N_1 := 1.31467$ $N_2 := 3.48429$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

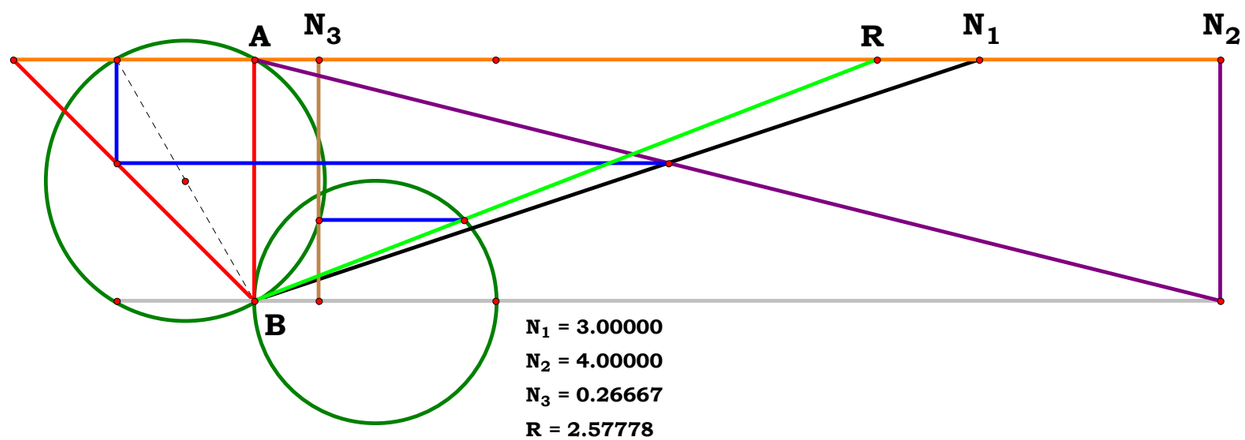
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $BT := BO + OT$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.26667$
$R = 2.57778$

$R := \frac{BT}{ST}$ $R = 2.117603$

$$\frac{\sqrt{(N_1+N_2)}+\sqrt{((4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))-(N_1+N_2))}+2\cdot\sqrt{(N_1+N_2)}\cdot\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}}{\sqrt{(N_1+N_2)}-\sqrt{(N_1+N_2)-(4\cdot N_3\cdot(N_2+N_1\cdot N_3+N_2\cdot N_3))}} - R = 0.00000$$

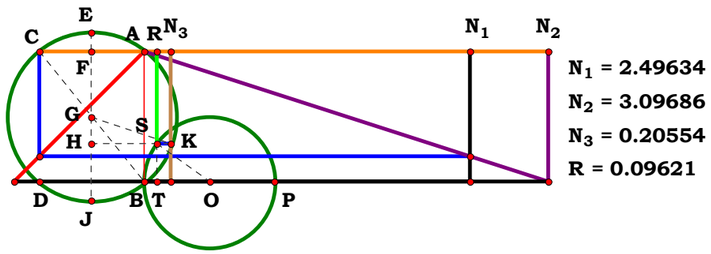
Definitions.

$$R - \frac{\sqrt{N_1 + N_2} + \sqrt{4\cdot N_3\cdot\left(N_2 + N_1\cdot N_3 + N_2\cdot N_3\right) - \left(N_1 + N_2\right)} + 2\cdot\sqrt{N_1 + N_2}\cdot\sqrt{N_1 + N_2 - 4\cdot N_3\cdot\left(N_2 + N_1\cdot N_3 + N_2\cdot N_3\right)}}{\sqrt{N_1 + N_2} - \sqrt{N_1 + N_2 - 4\cdot N_3\cdot\left(N_2 + N_1\cdot N_3 + N_2\cdot N_3\right)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{2\cdot C\cdot\sqrt{(A+B)}\cdot\sqrt{\left(C^2 - 4\cdot N_u^2\right)\cdot(A+B) - 4\cdot A\cdot C\cdot N_u} - \left[\left(C^2 - 4\cdot N_u^2\right)\cdot(A+B) - 4\cdot A\cdot C\cdot N_u\right]} + C\cdot\sqrt{(A+B)}}{C\cdot\sqrt{(A+B)} - \sqrt{\left(C^2 - 4\cdot N_u^2\right)\cdot(A+B) - 4\cdot A\cdot C\cdot N_u}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4\cdot X\cdot Z^2\cdot p + 4\cdot Y\cdot Z^2\cdot o - X\cdot p\cdot q^2 - Y\cdot o\cdot q^2 + 2\cdot q\cdot\sqrt{X\cdot p + Y\cdot o}\cdot\sqrt{X\cdot p\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o - 4\cdot X\cdot Z^2\cdot p + Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z\cdot o\cdot q}} + 4\cdot Y\cdot Z\cdot o\cdot q + q\cdot\sqrt{X\cdot p + Y\cdot o}}{q\cdot\sqrt{X\cdot p + Y\cdot o} - \sqrt{X\cdot p\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o - 4\cdot X\cdot Z^2\cdot p + Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z\cdot o\cdot q}} = 0$$

4RST10CAB5R0



$N_1 = 2.49634$
$N_2 = 3.09686$
$N_3 = 0.20554$
$R = 0.09621$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 3.09686$ $N_3 := .20554$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

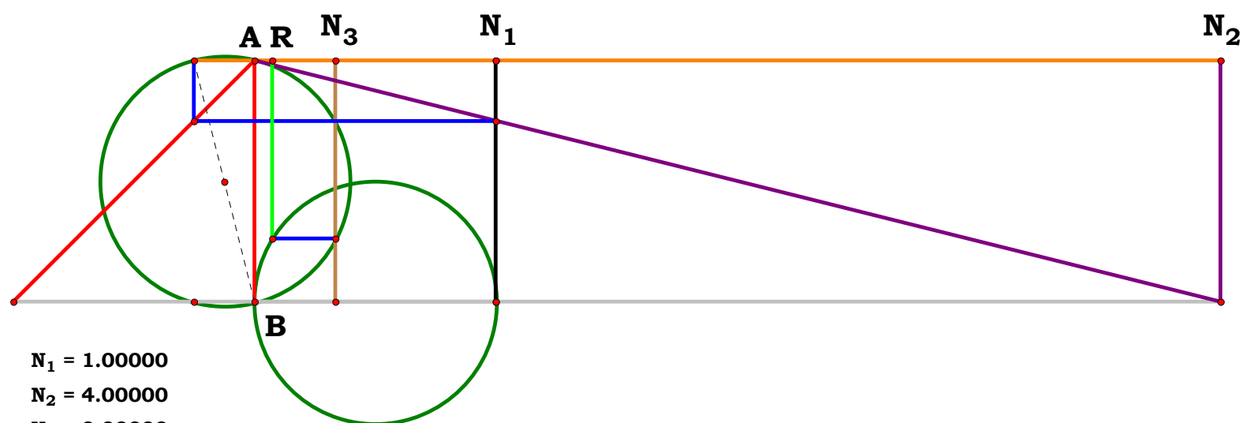
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO - OT$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 0.33333$
$R = 0.07556$

$R = 0.096218$

$$\frac{\sqrt{N_2} - \sqrt{((4 \cdot N_3 \cdot (N_1 + N_2 \cdot N_3)) - N_2) + 2 \cdot \sqrt{N_2} \cdot \sqrt{N_2 - (4 \cdot N_3 \cdot (N_1 + N_2 \cdot N_3))}}}{2 \cdot \sqrt{N_2}} - R = 0.00000$$

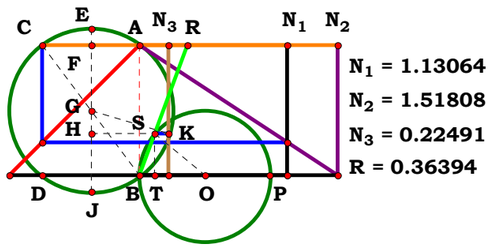
Definitions.

$$R - \frac{\sqrt{N_2} - \sqrt{4 \cdot N_3 \cdot (N_1 + N_2 \cdot N_3) - N_2 + 2 \cdot \sqrt{N_2} \cdot \sqrt{N_2 - 4 \cdot N_3 \cdot (N_1 + N_2 \cdot N_3)}}}{2 \cdot \sqrt{N_2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C \cdot (A \cdot B)^{\frac{3}{4}} - \sqrt{\left[2 \cdot A \cdot B^{\frac{3}{2}} \cdot C \cdot \sqrt{A \cdot C^2 - 4 \cdot N_u \cdot (B \cdot C + A \cdot N_u)} - \left[A \cdot B \cdot \left(C^2 - 4 \cdot N_u^2\right) - 4 \cdot B^2 \cdot C \cdot N_u\right] \cdot \sqrt{A \cdot B}\right]}}{2 \cdot C \cdot (A \cdot B)^{\frac{3}{4}}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y} \cdot q \cdot (o \cdot p)^{\frac{3}{4}} - \sqrt{p} \cdot \sqrt{4 \cdot Y \cdot Z^2 \cdot o \cdot \sqrt{o \cdot p} - Y \cdot o \cdot q^2 \cdot \sqrt{o \cdot p} + 4 \cdot X \cdot Z \cdot p \cdot q \cdot \sqrt{o \cdot p} + 2 \cdot \sqrt{Y} \cdot o \cdot \sqrt{p} \cdot q \cdot \sqrt{Y \cdot o \cdot q^2 - 4 \cdot X \cdot p \cdot Z \cdot q - 4 \cdot Y \cdot o \cdot Z^2}}}{2 \cdot \sqrt{Y} \cdot (o \cdot p)^{\frac{3}{4}} \cdot q} = 0$$

4RST10CAB5R1



Unit. $AB := 1$ Given. $N_1 := 1.13064$ $N_2 := 1.51808$ $N_3 := .22491$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

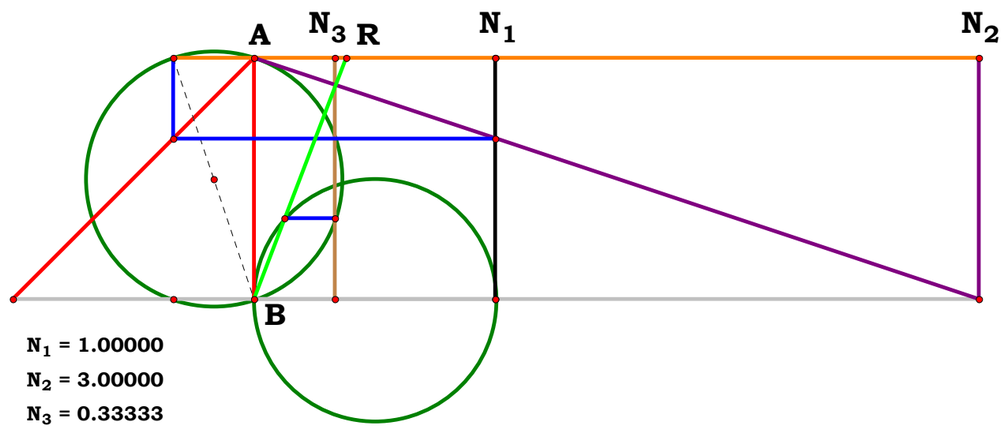
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $BT := BO - OT$

$R := \frac{BT}{ST}$ $R = 0.363945$



$$\frac{\sqrt{((4\cdot N_3\cdot(N_1+N_2\cdot N_3))-N_2)+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-(4\cdot N_3\cdot(N_1+N_2\cdot N_3))}}-\sqrt{N_2}}{\sqrt{N_2-(4\cdot N_3\cdot(N_1+N_2\cdot N_3))}-\sqrt{N_2}}-R = 0.00000$$

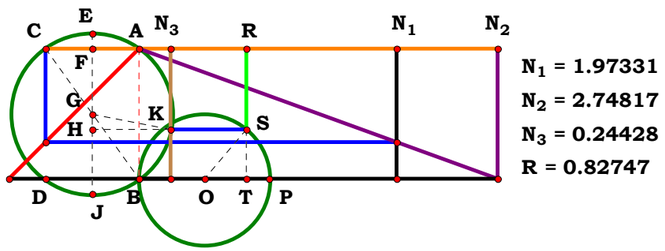
Definitions.

$$R - \frac{\sqrt{4\cdot N_3\cdot(N_1+N_2\cdot N_3)-N_2+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-4\cdot N_3\cdot(N_1+N_2\cdot N_3)}}-\sqrt{N_2}}{\sqrt{N_2-4\cdot N_3\cdot(N_1+N_2\cdot N_3)}-\sqrt{N_2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot(A\cdot B)^{\frac{3}{4}} - \sqrt{B}\cdot\sqrt{2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot(B\cdot C + A\cdot N_u)}} - \left[A\cdot C^2 - 4\cdot N_u\cdot(B\cdot C + A\cdot N_u)\right]\cdot\sqrt{A\cdot B}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{A\cdot B} - \sqrt{B}\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot(B\cdot C + A\cdot N_u)}\right]} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}} - \sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p} - Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p} + 4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p} + 2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot X\cdot p\cdot Z\cdot q - 4\cdot Y\cdot o\cdot Z^2}}}{(o\cdot p)^{\frac{1}{4}}\cdot\left(\sqrt{Y}\cdot q\cdot\sqrt{o\cdot p} - \sqrt{p}\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot X\cdot p\cdot Z\cdot q - 4\cdot Y\cdot o\cdot Z^2}\right)} = 0$$

4RST10CAB5R2



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.24428$
$R = 0.82747$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

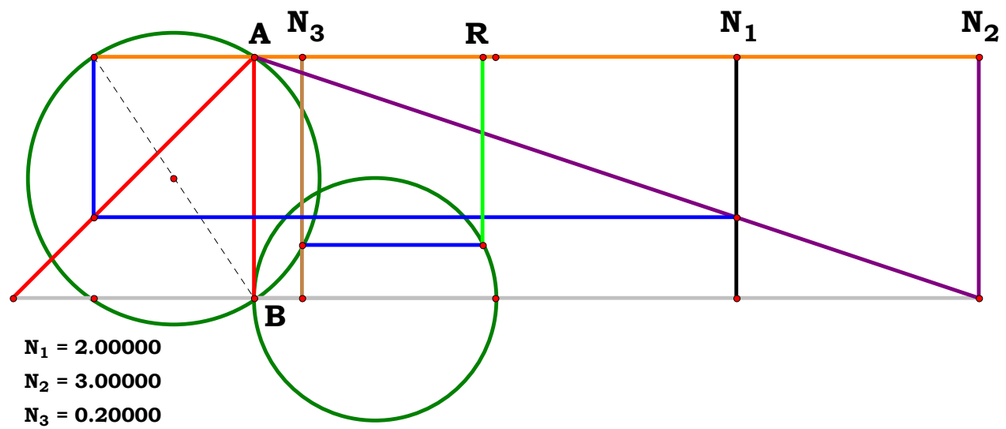
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO + OT$

$R = 0.827471$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 0.20000$
$R = 0.94746$

$$\frac{\sqrt{N_2}+\sqrt{((4\cdot N_3\cdot(N_1+N_2\cdot N_3))-N_2)+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-(4\cdot N_3\cdot(N_1+N_2\cdot N_3))}}}{2\cdot\sqrt{N_2}} - R = 0.00000$$

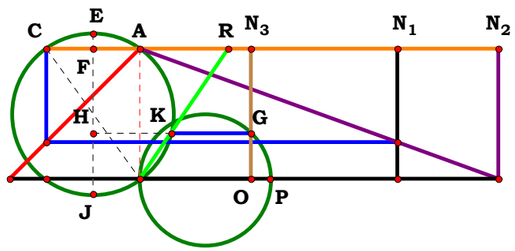
Definitions.

$$R - \frac{\sqrt{N_2}+\sqrt{4\cdot N_3\cdot(N_1+N_2\cdot N_3)-N_2+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-4\cdot N_3\cdot(N_1+N_2\cdot N_3)}}}{2\cdot\sqrt{N_2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^2\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^2\right)\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p}-Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p}+4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p}+2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2-4\cdot X\cdot p\cdot Z\cdot q-4\cdot Y\cdot o\cdot Z^2}}+\sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}}}{2\cdot\sqrt{Y}\cdot(o\cdot p)^{\frac{3}{4}}\cdot q} = 0$$

4RST10CAB5R3



$N_1 = 1.97331$

$N_2 = 2.74817$

$N_3 = 0.85448$

$R = 0.67671$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

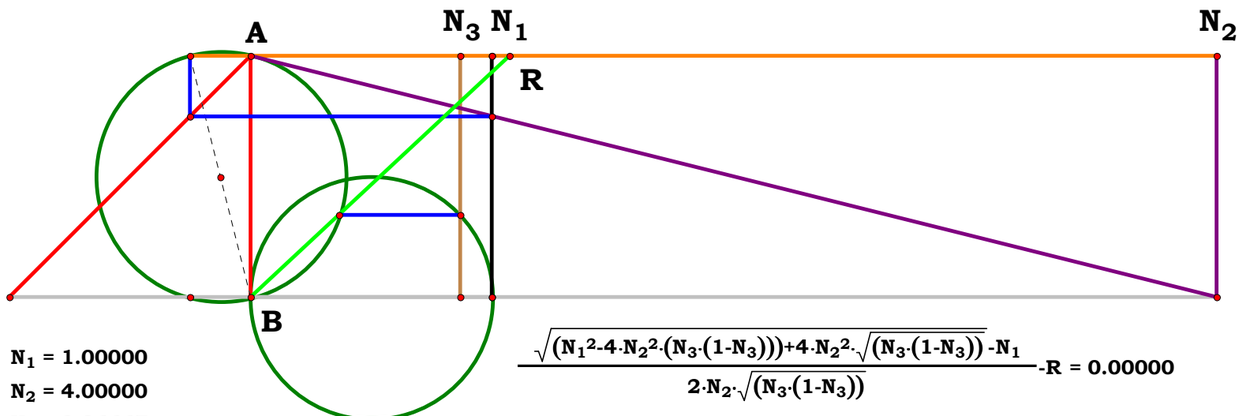
$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.6767$



$N_1 = 1.00000$

$N_2 = 4.00000$

$N_3 = 0.86667$

$R = 1.07345$

$$\frac{\sqrt{(N_1^2 - 4 \cdot N_2^2 \cdot (N_3 \cdot (1 - N_3))) + 4 \cdot N_2^2 \cdot \sqrt{(N_3 \cdot (1 - N_3))}} - N_1}{2 \cdot N_2 \cdot \sqrt{(N_3 \cdot (1 - N_3))}} - R = 0.00000$$

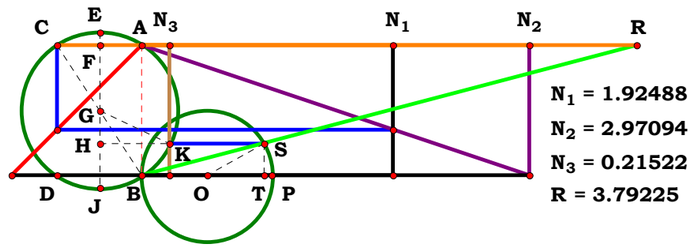
Definitions.

$$R - \frac{\sqrt{N_1^2 - 4 \cdot N_2^2 \cdot N_3 \cdot (1 - N_3) + 4 \cdot N_2^2 \cdot \sqrt{N_3 \cdot (1 - N_3)}} - N_1}{2 \cdot N_2 \cdot \sqrt{N_3 \cdot (1 - N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot N_u^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C}{2 \cdot A \cdot \sqrt{N_u \cdot (C - N_u)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4 \cdot Y^2 \cdot Z^2 \cdot o^2 + X^2 \cdot p^2 \cdot q^2 - 4 \cdot Y^2 \cdot Z \cdot o^2 \cdot q + 4 \cdot Y^2 \cdot o^2 \cdot q \cdot \sqrt{Z \cdot q - Z^2}} - X \cdot p \cdot q}{2 \cdot Y \cdot o \cdot \sqrt{Z \cdot q - Z^2}} = 0$$

4RST10CAB5R4



$N_1 = 1.92488$
$N_2 = 2.97094$
$N_3 = 0.21522$
$R = 3.79225$

Unit. $AB := 1$ Given. $N_1 := 1.92488$ $N_2 := 2.97094$ $N_3 := .21522$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

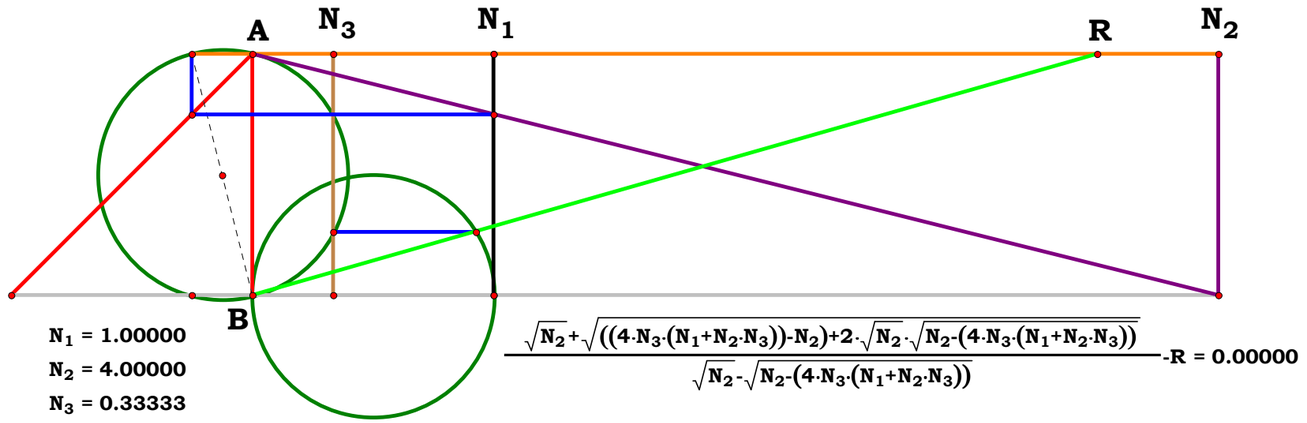
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $BT := BO + OT$

$R := \frac{BT}{ST}$ $R = 3.792343$



$N_1 = 1.00000$
$N_2 = 4.00000$
$N_3 = 0.33333$
$R = 3.49771$

$$\frac{\sqrt{N_2}+\sqrt{((4\cdot N_3\cdot(N_1+N_2\cdot N_3))-N_2)+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-(4\cdot N_3\cdot(N_1+N_2\cdot N_3))}}}{\sqrt{N_2}-\sqrt{N_2-(4\cdot N_3\cdot(N_1+N_2\cdot N_3))}} - R = 0.00000$$

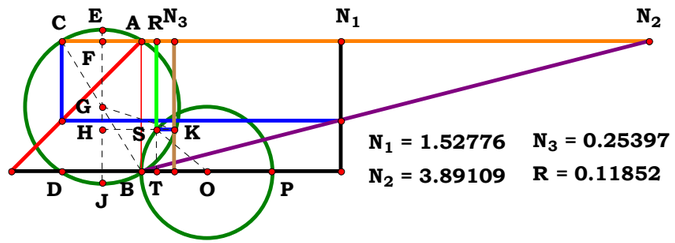
Definitions.

$$R - \frac{\sqrt{N_2}+\sqrt{4\cdot N_3\cdot(N_1+N_2\cdot N_3)-N_2+2\cdot\sqrt{N_2}\cdot\sqrt{N_2-4\cdot N_3\cdot(N_1+N_2\cdot N_3)}}}{\sqrt{N_2}-\sqrt{N_2-4\cdot N_3\cdot(N_1+N_2\cdot N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot(A\cdot B)^{\frac{3}{4}}+\sqrt{B}\cdot\sqrt{2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{A\cdot C^2-4\cdot N_u\cdot(B\cdot C+A\cdot N_u)}-\left[A\cdot C^2-4\cdot N_u\cdot(B\cdot C+A\cdot N_u)\right]}\cdot\sqrt{A\cdot B}}{\left[C\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{A\cdot C^2-4\cdot N_u\cdot(B\cdot C+A\cdot N_u)}\right]\cdot(A\cdot B)^{\frac{1}{4}}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p}-Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p}+4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p}+2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2-4\cdot X\cdot p\cdot Z\cdot q-4\cdot Y\cdot o\cdot Z^2}}+\sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}}}{(o\cdot p)^{\frac{1}{4}}\cdot\left(\sqrt{Y}\cdot q\cdot\sqrt{o\cdot p}-\sqrt{p}\cdot\sqrt{Y\cdot o\cdot q^2-4\cdot X\cdot p\cdot Z\cdot q-4\cdot Y\cdot o\cdot Z^2}\right)} = 0$$

4RST10CAB6R0



Unit. $AB := 1$ Given. $N_1 := 1.52776$ $N_2 := 3.89109$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

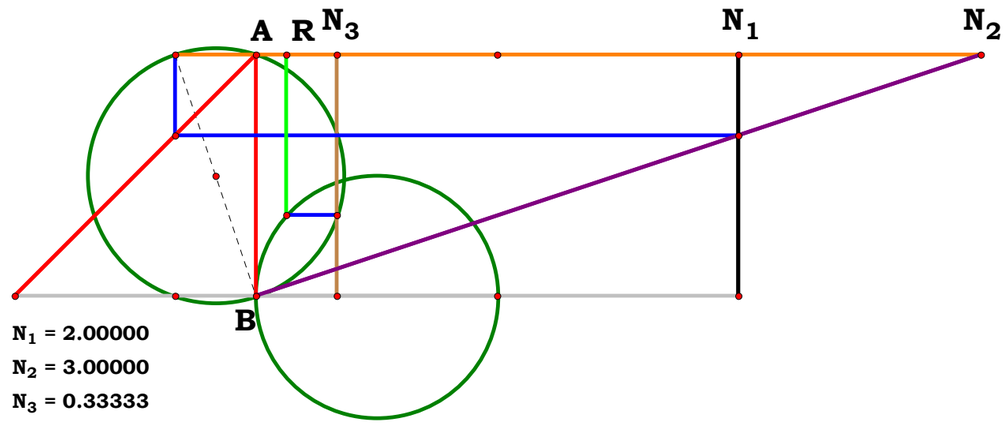
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO - OT$



$R = 0.118531$

$$\frac{\sqrt{N_2} - \sqrt{2 \cdot \sqrt{N_2} \cdot \sqrt{N_2 + (4 \cdot N_3 \cdot (N_1 - N_2 - N_2 \cdot N_3)) - (4 \cdot N_3 \cdot (N_1 - N_2 - N_2 \cdot N_3)) - N_2}}}{2 \cdot \sqrt{N_2}} - R = 0.00000$$

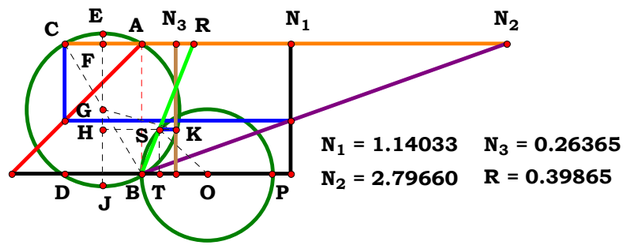
Definitions.

$$R - \frac{\sqrt{N_2} - \sqrt{2 \cdot \sqrt{N_2} \cdot \sqrt{N_2 + 4 \cdot N_3 \cdot (N_1 - N_2 - N_2 \cdot N_3)} - 4 \cdot N_3 \cdot (N_1 - N_2 - N_2 \cdot N_3) - N_2}}{2 \cdot \sqrt{N_2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C \cdot (A \cdot B)^{\frac{3}{4}} - \sqrt{B} \cdot \sqrt{2 \cdot A \cdot \sqrt{B} \cdot C \cdot \sqrt{A \cdot C^2 - 4 \cdot N_u \cdot (A \cdot C - B \cdot C + A \cdot N_u)}} - \left[A \cdot C^2 - 4 \cdot N_u \cdot (A \cdot C - B \cdot C + A \cdot N_u)\right] \cdot \sqrt{A \cdot B}}{2 \cdot C \cdot (A \cdot B)^{\frac{3}{4}}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y} \cdot q \cdot (o \cdot p)^{\frac{3}{4}} - \sqrt{p} \cdot \sqrt{4 \cdot Y \cdot Z^2 \cdot o \cdot \sqrt{o \cdot p} - Y \cdot o \cdot q^2 \cdot \sqrt{o \cdot p} - 4 \cdot X \cdot Z \cdot p \cdot q \cdot \sqrt{o \cdot p} + 4 \cdot Y \cdot Z \cdot o \cdot q \cdot \sqrt{o \cdot p} + 2 \cdot \sqrt{Y} \cdot o \cdot \sqrt{p} \cdot q \cdot \sqrt{Y \cdot o \cdot q^2 - 4 \cdot Y \cdot Z^2 \cdot o + 4 \cdot X \cdot Z \cdot p \cdot q - 4 \cdot Y \cdot Z \cdot o \cdot q}}}{2 \cdot \sqrt{Y} \cdot (o \cdot p)^{\frac{3}{4}} \cdot q} = 0$$

4RST10CAB6R1



Unit. $AB := 1$ Given. $N_1 := 1.14033$ $N_2 := 2.79660$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

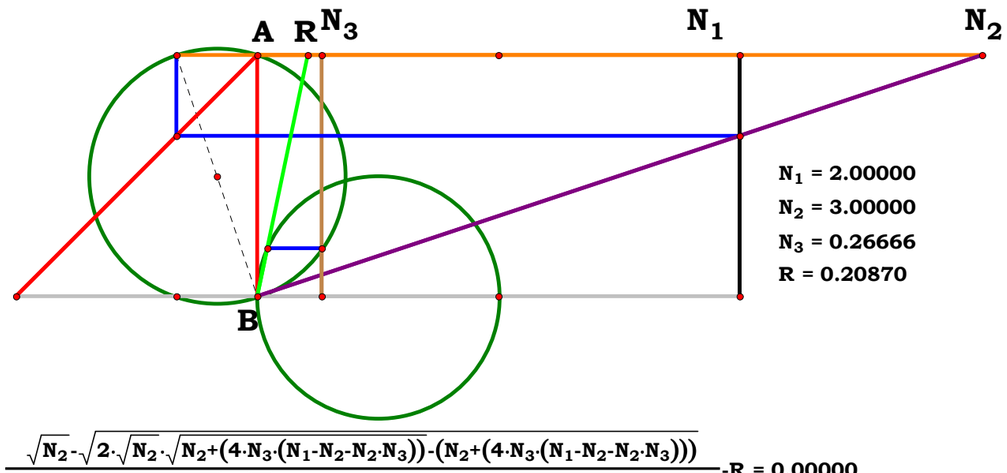
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$BT := BO - OT$ $R := \frac{BT}{ST}$ $R = 0.398638$



$$\frac{\sqrt{N_2}-\sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}-(N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3)))}}{\sqrt{N_2}-\sqrt{N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}}-R = 0.00000$$

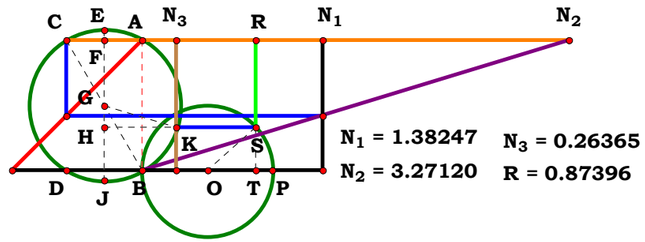
Definitions.

$$R - \frac{\sqrt{N_2} - \sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2 + 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3)} - \left[N_2 + 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3)\right]}}{\sqrt{N_2} - \sqrt{N_2 + 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot(A\cdot B)^{\frac{3}{4}} - \sqrt{B}\cdot\sqrt{2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot\left[C\cdot(A-B) + A\cdot N_u\right]}} - \left[A\cdot C^2 - 4\cdot N_u\cdot\left[C\cdot(A-B) + A\cdot N_u\right]\right]\cdot\sqrt{A\cdot B}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{A\cdot B} - \sqrt{B}\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot\left[C\cdot(A-B) + A\cdot N_u\right]}\right]} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}} - \sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p} - Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p} - 4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p} + 4\cdot Y\cdot Z\cdot o\cdot q\cdot\sqrt{o\cdot p} + 2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o + 4\cdot X\cdot Z\cdot p\cdot q - 4\cdot Y\cdot Z\cdot o\cdot q}}}{\left(\sqrt{Y}\cdot q\cdot\sqrt{o\cdot p} - \sqrt{p}\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o + 4\cdot X\cdot Z\cdot p\cdot q - 4\cdot Y\cdot Z\cdot o\cdot q}\right)\cdot(o\cdot p)^{\frac{1}{4}}} = 0$$

4RST10CAB6R2



Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 3.27130$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

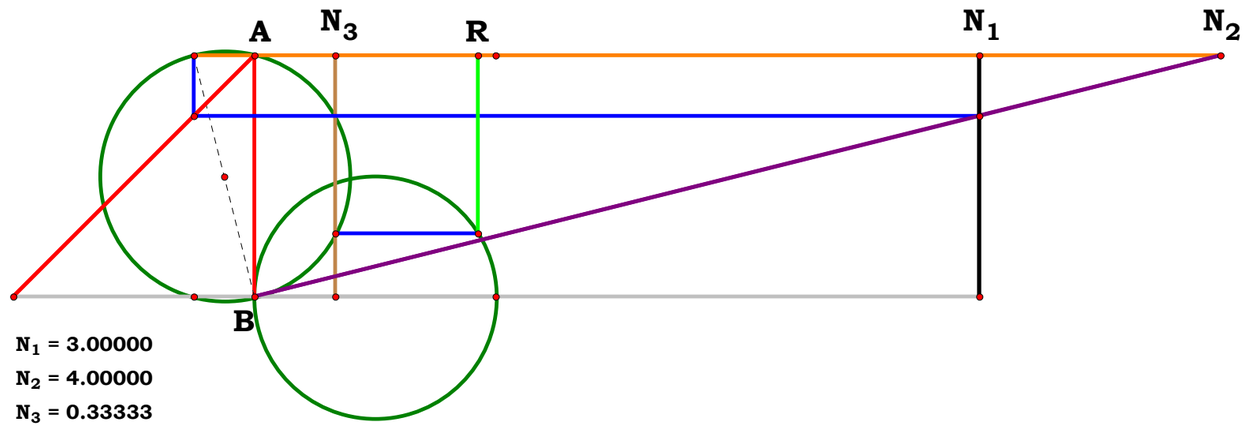
$GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$

$OT := \sqrt{BO^2 - ST^2}$ $R := BO + OT$

$R = 0.873958$



$$\frac{\sqrt{N_2}+\sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}-(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}-N_2}{2\cdot\sqrt{N_2}} - R = 0.00000$$

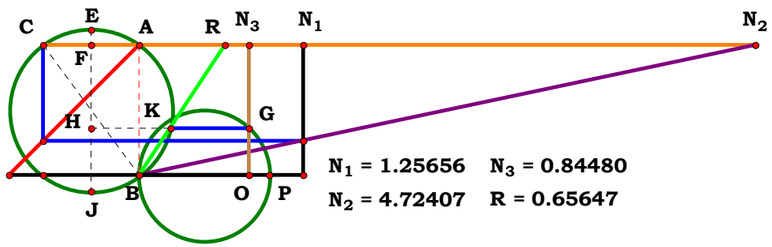
Definitions.

$$R - \frac{\sqrt{N_2}+\sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2+4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3)}-4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3)}-N_2}{2\cdot\sqrt{N_2}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{C\cdot(A\cdot B)^{\frac{3}{4}}+\sqrt{B}\cdot\sqrt{2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{A\cdot C^2-4\cdot N_u\cdot[C\cdot(A-B)+A\cdot N_u]}-[A\cdot C^2-4\cdot N_u\cdot[C\cdot(A-B)+A\cdot N_u]]\cdot\sqrt{A\cdot B}}}{2\cdot C\cdot(A\cdot B)^{\frac{3}{4}}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p}-Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p}-4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p}+4\cdot Y\cdot Z\cdot o\cdot q\cdot\sqrt{o\cdot p}+2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2-4\cdot Y\cdot Z^2\cdot o+4\cdot X\cdot Z\cdot p\cdot q-4\cdot Y\cdot Z\cdot o\cdot q}}+\sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}}}{2\cdot\sqrt{Y}\cdot(o\cdot p)^{\frac{3}{4}}\cdot q} = 0$$

4RST10CAB6R3



Unit. $AB := 1$ Given. $N_1 := 1.25656$ $N_2 := 4.72407$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

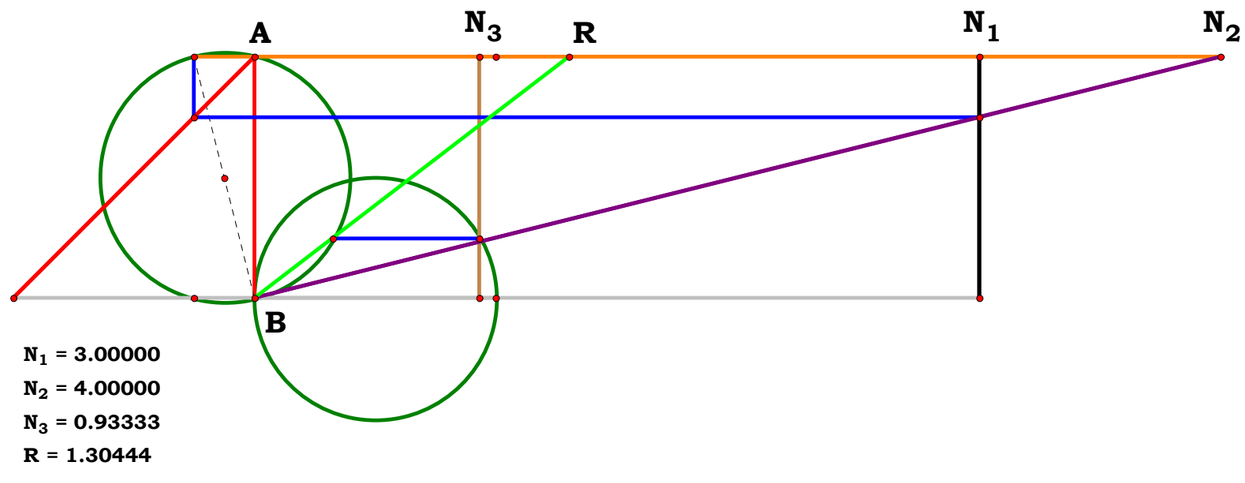
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$BP := AB$ $GO := \sqrt{N_3 \cdot (BP - N_3)}$

$HJ := GO + EF$ $HK := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HK - AF}{GO}$ $R = 0.656473$



$$\frac{(N_1-N_2)+\sqrt{(4\cdot N_2^2\cdot\sqrt{(N_3\cdot(1-N_3))}-4\cdot N_2^2\cdot(N_3\cdot(1-N_3)))+(N_1-N_2)^2}}{2\cdot N_2\cdot\sqrt{(N_3\cdot(1-N_3))}}-R = 0.00000$$

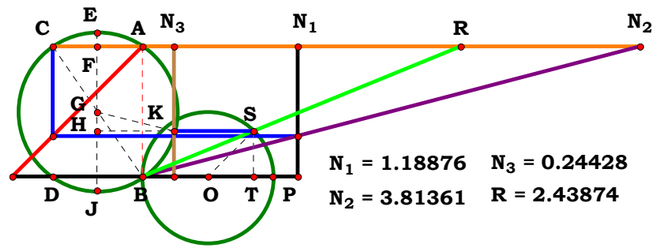
Definitions.

$$R - \frac{(N_1 - N_2) + \sqrt{4\cdot N_2^2\cdot\sqrt{N_3\cdot(1-N_3)} - 4\cdot N_2^2\cdot N_3\cdot(1-N_3) + (N_1-N_2)^2}}{2\cdot N_2\cdot\sqrt{N_3\cdot(1-N_3)}} = 0 \qquad N_1 - \frac{N_u}{A} = 0 \quad N_2 - \frac{N_u}{B} = 0 \quad N_3 - \frac{N_u}{C} = 0$$

$$R - \frac{\sqrt{C^2\cdot(A^2+B^2-2\cdot A\cdot B) - 4\cdot A^2\cdot\left(C\cdot N_u - C\cdot\sqrt{C\cdot N_u - N_u^2} - N_u^2\right)} - C\cdot(A-B)}{2\cdot A\cdot\sqrt{N_u\cdot(C-N_u)}} = 0 \qquad N_1 - \frac{X}{o} = 0 \quad N_2 - \frac{Y}{p} = 0 \quad N_3 - \frac{Z}{q} = 0$$

$$R - \frac{\sqrt{4\cdot Y^2\cdot Z^2\cdot o^2 + X^2\cdot p^2\cdot q^2 + Y^2\cdot o^2\cdot q^2 - 4\cdot Y^2\cdot Z\cdot o^2\cdot q + 4\cdot Y^2\cdot o^2\cdot q\cdot\sqrt{Z\cdot q - Z^2} - 2\cdot X\cdot Y\cdot o\cdot p\cdot q^2} + X\cdot p\cdot q - Y\cdot o\cdot q}{2\cdot Y\cdot o\cdot\sqrt{Z\cdot q - Z^2}} = 0$$

4RST10CAB6R4



$N_1 = 1.18876$ $N_3 = 0.24428$
$N_2 = 3.81361$ $R = 2.43874$

Unit. $AB := 1$ Given. $N_1 := 1.18876$ $N_2 := 3.81361$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$X := 20$ $Y := 19$ $Z := 18$ $o := \frac{X}{N_1}$ $p := \frac{Y}{N_2}$ $q := \frac{Z}{N_3}$

Descriptions.

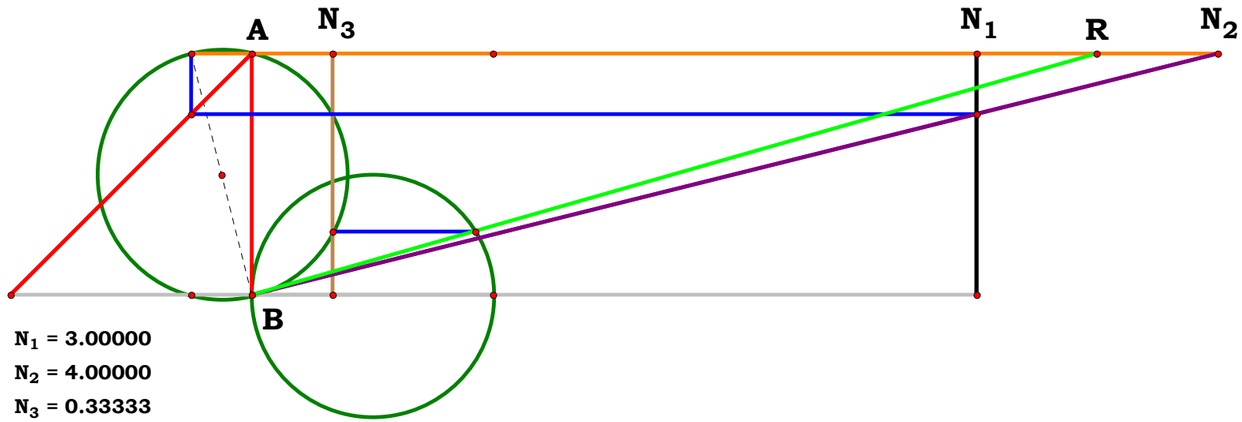
$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EJ - AB}{2}$ $GK := \frac{EJ}{2}$ $HK := AF + N_3$

$GH := \sqrt{GK^2 - HK^2}$ $ST := GK - (GH + EF)$

$BP := AB$ $BO := \frac{BP}{2}$ $OT := \sqrt{BO^2 - ST^2}$

$BT := BO + OT$ $R := \frac{BT}{ST}$ $R = 2.438738$



$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 0.33333$
$R = 3.49771$

$$\frac{\sqrt{N_2}+\sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}-(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))-N_2}}{\sqrt{N_2}-\sqrt{N_2+(4\cdot N_3\cdot(N_1-N_2-N_2\cdot N_3))}} - R = 0.00000$$

Definitions.

$$R - \frac{\sqrt{N_2} + \sqrt{2\cdot\sqrt{N_2}\cdot\sqrt{N_2 + 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3)} - 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3) - N_2}}{\sqrt{N_2} - \sqrt{N_2 + 4\cdot N_3\cdot(N_1 - N_2 - N_2\cdot N_3)}} = 0$$

$N_1 - \frac{N_u}{A} = 0$ $N_2 - \frac{N_u}{B} = 0$ $N_3 - \frac{N_u}{C} = 0$

$$R - \frac{C\cdot(A\cdot B)^{\frac{3}{4}} + \sqrt{B}\cdot\sqrt{2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot[C\cdot(A-B)+A\cdot N_u]}} - [A\cdot C^2 - 4\cdot N_u\cdot[C\cdot(A-B)+A\cdot N_u]]\cdot\sqrt{A\cdot B}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{A\cdot B} - \sqrt{B}\cdot\sqrt{A\cdot C^2 - 4\cdot N_u\cdot[C\cdot(A-B)+A\cdot N_u]}\right]} = 0$$

$N_1 - \frac{X}{o} = 0$ $N_2 - \frac{Y}{p} = 0$ $N_3 - \frac{Z}{q} = 0$

$$R - \frac{\sqrt{p}\cdot\sqrt{4\cdot Y\cdot Z^2\cdot o\cdot\sqrt{o\cdot p} - Y\cdot o\cdot q^2\cdot\sqrt{o\cdot p} - 4\cdot X\cdot Z\cdot p\cdot q\cdot\sqrt{o\cdot p} + 4\cdot Y\cdot Z\cdot o\cdot q\cdot\sqrt{o\cdot p} + 2\cdot\sqrt{Y}\cdot o\cdot\sqrt{p}\cdot q\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o + 4\cdot X\cdot Z\cdot p\cdot q - 4\cdot Y\cdot Z\cdot o\cdot q}} + \sqrt{Y}\cdot q\cdot(o\cdot p)^{\frac{3}{4}}}{(o\cdot p)^{\frac{1}{4}}\cdot\left(\sqrt{Y}\cdot q\cdot\sqrt{o\cdot p} - \sqrt{p}\cdot\sqrt{Y\cdot o\cdot q^2 - 4\cdot Y\cdot Z^2\cdot o + 4\cdot X\cdot Z\cdot p\cdot q - 4\cdot Y\cdot Z\cdot o\cdot q}\right)} = 0$$